D301.60:314

APRIL 1959

THE Airman

OFFICIAL JOURNAL OF THE AIR FORCE

PUBLICATIONS
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United States airpower exemplifies our country's firm determination to achieve peace through strength.—GENERAL THOMAS D. WHITE.

TITAN, ICBM

The Air Force's ICBM *Titan*, has completed successful launch tests at Cape Canaveral, Fla. The two-stage, 90-foot rocket is intended to augment the inventory of retaliatory weapons assigned to the Strategic Air Command. In operational use, the *Titan* will be fired from underground launch sites.

The Martin Company Photo

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SUBSCRIPTIONS

THE AIRMAN is available on subscription for $3.50 per year domestic, $4.75 foreign, 35¢ per copy, through the Superintendent of Documents, Government Printing Office, Washington 25, D. C. No back copies can be furnished.

Editorial Office: THE AIRMAN, Room 2-206 Tempo E, 4th and Adams Drive SW, Washington 25, D. C. Telephone: LIberty 5-6700, Ext. 67393.

THE AIRMAN is primarily a medium for the exchange of ideas and information among Air Force personnel. Readers are encouraged to submit articles, short subjects, photographs, and artwork. All contributions will be given consideration; suggestions and criticisms are welcomed. Opinions expressed by individual contributors do not necessarily reflect the official viewpoint of the Department of the Air Force. All photographs are official USAF photos unless otherwise designated.

Use of funds for printing this publication approved by the Secretary of the Air Force and the Director of the Bureau of the Budget July 5, 1956.

THE Airman

OFFICIAL JOURNAL OF THE AIR FORCE

VOLUME III, NUMBER 4 APRIL 1959

CONTENTS

A Heel and A Hero
Lackland's TI is just that 4

What Good Is The IG?
How this "jack of all trades" helps you 10

Song of Sixpence
All USAF's Comptroller wants is the facts 16

Trailblazers in the Sky
Aerial chart makers plot for today and tomorrow 18

Tall Texan
In the Philippines a sergeant has built his 'chicken farm' 21

Aerial Triune for Peace
Commands join to speed F-104s to Far East 24

Two by Sea
Airmen earn Medal of Honor for ground action 26

Roadmap for Your Future
New career avenues opened to USAF officers 28

Apron-String Boy
Colonel Bolling climbs his church steeples 31

Mobile Communicators
The strong arm of peace needs ears and a voice 40

How Legal Assistance Can Help You
Your legal problems should go to your base LAO 43

DEPARTMENTS

Letters to the Editor ..... 2 **In This Issue** 3

Airman's World ..... 33 **In My Opinion** 39

Slants on Space 48

NO THANKS!

Sir: *I have just read your article on EOD in the December issue of* THE AIRMAN, *and I'd like to pass along some compliments on a job well done. Captain Sturm did the article up so well that many men here are wondering if he has ever been in the business. If not, we'd like to offer him an honorary membership in our fraternity. One other point, is there any chance your magazine might publish the winning entry in the USAF short story contest each year? Finally, my thanks on behalf of the men over here for the fine job you are doing with* THE AIRMAN. *It fills a gap that has existed in the Air Force for a long time.*

Maj. Charles Stevenson
APO 22, New York, N. Y.

The author is being exceeding cautious about accepting the honorary membership which you have so generously offered. First question he raised was that of initiation requirements—such as de-arming a small H bomb? After due consideration, his answer is, "Thanks, but no thanks!" We have checked the winning entries in the short story contest in the past, but have found two major problems which deter us. First, the stories are normally too long for our use, and secondly, often the Air Force theme is lacking. But thanks for the kind words.

★ ★ ★

HATS OFF

Sir: *Allow me to return a richly deserved "well done" to Mr. Milton Caniff on his salute to the men, truly heroes all, of the Air Rescue Service.* *(See, page 48, Nov. '58 issue.)*

A/1C William P. Smith
Laurence G. Hanscom Field, Mass.

Sir: *My thanks to you and your staff for the excellent treatment accorded my layout on the Air Rescue Service.*

Milt Caniff
New City, N. Y.

USAFIT

Sir: *Is there any specific reason why present applicants for attendance at the United States Air Force Institute of Technology must be from the officer ranks? I would like to suggest the possibility of opening the institute to enlisted members of USAF as a means of completing undergraduate work which has been started in the off-duty educational program.*

A/1C Leslie Peverall
APO 238, New York, N. Y.

Officials in the Professional Education Division, DCS/Personnel, Hq USAF, inform us that the Air Force established the Institute of Technology educational program in terms of specific requirements for officers to serve in the various career fields where this education is needed. It is expected it will continue to be geared to specific identified requirements rather than general education. However, in recognition of the educational potential of airmen, a plan is now being studied that would provide USAFIT undergraduate education in a manner similar to your suggestion.

★ ★ ★

SEPARATION

Sir: *Many questions regarding the subject of separation and reenlistment are puzzling me and a search through most of the governing regulations does not sufficiently clarify the problem. Would it be possible for you to run a* You Ask It *column on this subject?*

Charles E. Neubaum
Chanute AFB, Ill.

In January, the Department of Defense issued a directive pertaining to uniform discharge procedures, service-wide, which went into effect the middle of this month. The changes it authorized are so sweeping that it has become necessary to completely revise most regulations pertaining to the subject. In the near future, no less than 15 new and revised regulations governing separations will be dispatched to the field. If, after they have taken effect, our letters indicate this same confusion exists, you may rest assured that we will run as many *You Ask It* columns as are necessary to help answer existing questions.

★ ★ ★

MEMORIALIZATION PROGRAM

Sir: *I would like some clarification on the subject matter contained in the article* Meet a Sportsman *which appeared in the January issue of* THE AIRMAN. *You state that MSgt. Woodrow Busby has a baseball park named for him. I have been under the impression that any facility on USAF property may only be named for a deceased person.*

MSgt. E. A. Williamson
APO 994, San Francisco, Calif.

Generally speaking, your assumption is correct. The regulation governing the Memorialization Program (AFR 900-9) does stipulate that bases and streets be named for deceased personnel. It also recommends that naming of other base facilities follow this same pattern; however, it leaves the prerogative for this action to the local commander. The general practice is to follow the regulation recommendation. However, there are exceptions, it seems, to every rule. For example, Hunter AFB, Ga., is named for a living person although it is the only such base. There is also another possibility in the Busby case. Although staff members are not familiar with the base at which Busby Park exists, we have reason to believe that the field is off-base and, therefore, not governed by the restrictions outlined in the cited regulation.

★ ★ ★

FICTION OR FACT

Sir: *In your December issue, the author of the article* Christmas at Chojo *stated that this base is the northernmost station operated by USAF in Japan. Although it is not pinpointed, I believe that Wakkanai Air Station rates this distinction.*

A/2C Daniel Whitney
Loring AFB, Maine

Chojo is a fictional station. The brief prologue to the article explained that the story was based on incidents which occurred during Maj. Robert Fuerst's tour of duty in Japan, but that the treatment was purely fictional.

INELIGIBLE

Sir: *I would like an interpretation of a section of the Veterans Readjustment Act of 1952 (the Korean G.I. Bill). One clause states that "education, provided under this act, must begin not later than three years after discharge or release from active service." I was discharged in 1955 and had a six-month break in service before reenlisting. Now that I have returned to active duty, am I still eligible for training under the provisions of this bill?*

Name Withheld

Officials at the Veterans Administration Office here in Washington say, "No," but very cautiously. The fact that you received a discharge and did not pursue your training at that time probably means that the cut-off date has come and gone in your particular case. However, there are several clauses contained in the act to cover "mitigating circumstances" and you might be eligible under one of these. Best advice is to make personal contact with your nearest VA office and give them all the pertinent information so they may make a decision.

★ ★ ★

MISPLACED

Sir: *Over the past years I have found your magazine both informative and written in a manner your editorial staff can well be proud of. However, your cover photo on the December, 1958 edition contains a rather glaring error. Capt. Martha Marsch, the flight nurse, is wearing her wings improperly centered.*

Capt. William Kressin
APO 919, San Francisco, Calif.

Sir: *The cover of the December 1958 issue of* THE AIRMAN *shocked me! AFM 35-10 is quite specific in outlining the proper wear of insignia on the Air Force uniform. While I am criticizing in this specific instance, however, I should also like to add my personal bouquet of orchids to the captain and all "angels with silver wings."*

M/Sgt. John Egan
George AFB, Calif.

While we agree that the positioning of Captain Marsch's insignia does not conform to the requirements outlined in the cited manual, we feel certain that there was good reason for the oversight. The photos for the story were directed to us from an outside source, and the cover shot was one of a series taken at innumerable stops. We understand that this particular one was taken as Captain Marsch stepped from a plane following an air evac flight and this may account for the misplaced wings.

★ ★ ★

TECHNICALITIES

Sir: *The picture in* Airman's World *in the December issue of* THE AIRMAN *which accompanied the story* Coordinated Save *should not have been used. The unit shown is either a CPN/4 or MPN/11 GCA unit and is used by AACS, but not by AC&W personnel.*

S/Sgt. William Price
Geiger Field, Wash.

As noted in the story, the two cited men were not from the same organization. The picture was sent to us from an outside source and was taken during the time in which these two officers were in Kansas City for the award ceremonies mentioned. We assume that the "stage was merely set" for the photo with the equipment available.

THE HUSTLER IS COMING

The somewhat ethereal and predictive theme on this month's cover originally appeared in the General Electric Company's 1959 calendar (September). With GE's permission, we adapted the painting by Bob McCall, Society of Illustrators, to herald the coming introduction of the portentous Convair B-58 *Hustler* into the USAF operational inventory.

SAC's 305th Bomb Wing, presently stationed at MacDill AFB, Fla., will be the first unit to be equipped with the new bomber. This pioneer B-47 wing will get B-58s at a date yet to be determined. The wing will first undergo transition training at Carswell AFB, Tex.

Supersonic, the *Hustler* — dubbed *Mach-in-Boid* by test pilots—can click off Mach 2 with little difficulty. Developed as a replacement for the B-47, it is virtually an automatic airplane, manned by a pilot, navigator-bombardier, and a defensive systems operator.

The *Hustler* reverses the trend toward larger and larger manned strategic aircraft. This reversal was possible because greater power from smaller bombs opened the door to smaller, more effective aircraft. Its disposable armament pod, slung beneath the slender fuselage, allows the B-58 to return home "clean" without the waste volume contained in an empty bomb bay. The pod can also be used for aerial cameras, electronic countermeasures equipment, and other devices instead of a bomb. This makes the B-58 extremely versatile.

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THE AIRMAN is printed for everyone in the Air Force regardless of grade. It is distributed free to all active Air Force units, Air Reserve Centers, and Air National Guard organizations. It is impossible to print a copy for everyone so each copy must be circulated. Distribution is made through the Publications Distribution Officer as recommended by the Information Services Officer.

Subscriptions are available to those who desire them. For convenience, a subscription blank is printed below. Make all checks or money orders payable to Treasurer of the United States.

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U. S. Government Printing Office
Washington 25, D. C.

Please send THE AIRMAN for one year to the following address. Enclosed is a check or money order for $3.50.

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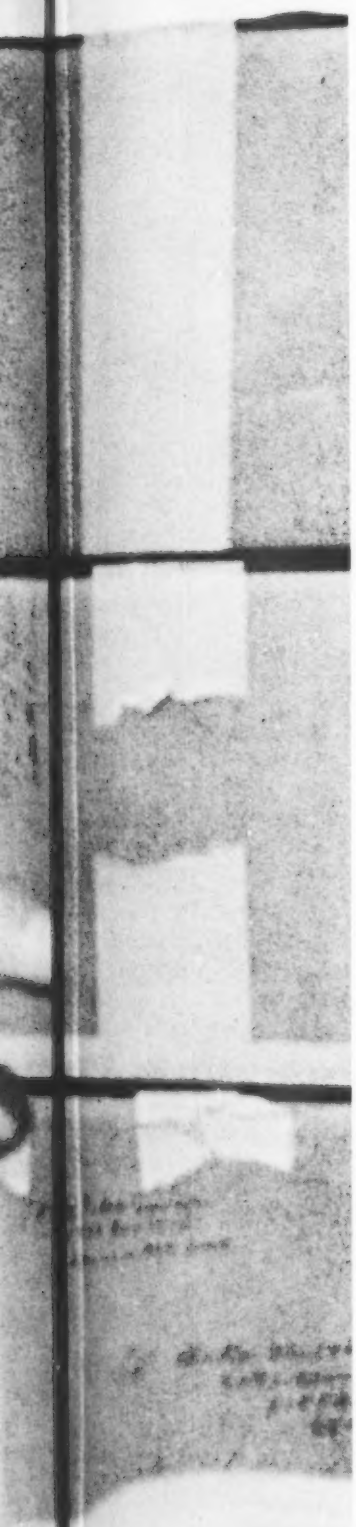


"You think you're men now? Show me! Prove it to me!"

A HEEL AND A HERO

by 1st Lt. David Y. Burkett
Hq, Air Training Command

He may be the Marine DI, the Army cadreman, or the Air Force TI, but his job is the same: work a miracle—within a short period of time transform the boot, the rookie, or the basic into a marine, a soldier, or an airman.

Probably no one kind of military man has been the center of as many public storms as has the training instructor. Fictionalized by paperback novels and the movie screen, tradition has it written that the training instructor (the top sergeant of World War II is the frequent example) is a man with little feeling, an ogre who takes delight in conceiving sadistic punishment for young American boys more accustomed to a carefree teen-age life than the rigors of military living.

But in the same breath wherein he's ridiculed and despised, there is also a note of herohood that supposedly surrounds this breed of man.

Tradition further writes that the training instructor's job is tedious, that he's faced with a mountain of responsibility, and that trainees regard him with the same respect a high school halfback mutters for his ramroding but successful coach.

In truth, the training instructor is a strange mixture of all of these opinions blended in varying amounts. He is both a hero and a heel depending on any number of circumstances.

Who is the training instructor and what does he do? Is the training that he conducts too easy or too tough for the teen-age boys who go through it? Anxious parents want to know.

The Air Force answer can be found 13 miles outside of San Antonio, Tex., at a place called Lackland Air Force Base—a spacious training community of white barracks, parade grounds, and thousands of young men sweltering under incessant Texas sun. All airmen entering the Air Force for the first time must enter through this base.

In 1957 alone, 97,000 boys—most of them in their late teens—trekked to Lackland to make the transformation from civilian life to military. Tens of thousands more will go this year and next.

To guide each transformation, the Air Force assigns a training instructor, a TI, to answer questions, teach obedience, and set an example. He's an unusual breed of man. To the new recruit, he's Mr. Air Force. During the weeks of training, he becomes father, mother, counselor,

boss, coach, and teacher. But never a best friend.

For four weeks or more, new trainees follow the pattern their TI sets. They need him because they don't know how to get along in the Air Force without him. He chews them out, sticks up for them, boosts the Air Force, and crawls all over them when they step out of line. He is feared, hated, and respected. At the same time, he's got to show the understanding of a father to a son.

The TI is a powerful man: in 24 hours he can destroy a group of men for the Air Force. In the same period of time, he can produce a group of men willing and even eager to learn.

Only the ex-basic airman can thoroughly understand the relationship that exists between the TI and the new trainee. To a young recruit, basic training is a strange, uncomfortable business of changing himself to fit the Air Force.

Basics come to Lackland from every state in the Union, and from Hawaii and Puerto Rico. Most of them are around 18 or 19 years old, fresh out of high school. For many of them, the trip to Lackland marks their first time away from mother and dad.

Basic training is a series of sensations, most of them curiously strange.

Sewing and Sirring

At first, the new trainee mostly wonders. Everyday is illed with bewilderment. To him, every hour seems to hold an unnatural experience that he must somehow meet and graple with. Maybe for the first time in his life, he's completely on his own. By himself, he faces the day-to-day problems of growing up. He must make it a habit to say "sir" to everyone at Lackland with more rank than himself, and he must remember to salute an officer when they meet. He must sew a button on his shirt, and make his bed every morning. He must pick up his own clothes and live every day according to a precise schedule over which he has no control.

The basic is afraid. The fear is that of doing wrong, of making a mistake. Fear of discipline and fear of failing, of not being able to make the grade.

He's homesick, too. Not necessarily the homesickness that makes him want his parents, although that is often present. The homesickness of the basic is the gnawing desire to be near something familiar—people, things, or places. To be in his own bed at night, to call his girl on the telephone, to tinker with his car, to do any of a thousand things that once he took for granted.

This is the new trainee as he comes to Lackland, ready to begin training. Within a few minutes after he arrives, he's assigned to a group of 50 to 70 other new recruits, called a "flight" in the Air Force, and he comes face-to-face with the man who will "show him how" to go about changing himself to fit the military—the TI.

There are nearly a thousand training instructors at Lackland; most of them have counted off 10 to 15 years in the military service, most of them are between 35 and 40 years of age, and most of them are married and have a family. Their job is tough: in only 20 training days they've got to teach the Air Force way of doing things to the 50 or so men in their flight.

They train by a schedule, but the hours never seem long enough to cover the myriad of subjects that include

Young recruits find basic training a bewildering, uncomfortable experience of changing themselves to fit the Air Force.

military law, wearing the uniform correctly, customs, courtesies, drill, and how to be a good follower as well as a good leader. The day seldom ends that the TI doesn't wonder if there wasn't something else he could have taught his basics.

He can never forget that the pattern he sets will be imitated by his flight. In fact, much of what basics learn comes from the TI's example. By eating all the food on his mess tray, the TI teaches new trainees not to waste a scrap. By walking straight and standing tall, he shows them how to look good. By saluting cleanly, he shows them how to get the edge in reporting to an officer.

His job is complex for he deals with minds and not machinery. His responsibility is gigantic for his attitude, his patience, and the knowledge he possesses determine how good or how bad the product is that he turns out for the Air Force.

The TI is aware of the fear, the bewilderment, and the homesickness holed up inside the new basic arriving at Lackland. But he doesn't let on that he understands, that he's seen hundreds of new trainees feeling the same way, or that he himself was once bewildered and afraid of militry living. He responds in quite a different way. From his experience in the Air Force, the two-month instructor training school he has attended, and the weeks of apprenticeship under veteran TIs, he chooses a better plan. He becomes an actor. His role is difficult, but if he plays it well he knows he stands a better chance of turning out a well-trained, well-disciplined flight.

"What's the first word out of your mouth, young Rainbow?"

And because of the role he plays, the TI gets his reputation.

A few minutes after a new trainee arrives at Lackland he meets his TI at the in-processing center.

Twenty-four hours a day, seven days a week, the same process of new trainees arriving and entering a flight is repeated. From this point, the strange relationship of the TI and the basic begins.

There is no formal meeting between the two of them. No handshaking and no welcome to the Air Force speech. Instead:

"All right, now Rainbows. Stand tall and listen to what I tell you. From now on, I'll tell you once what I want you to know and you'll get it then. There won't be any repeats. And you won't know anything except what I tell you. Listen up now, Rainbows. I'm telling you how to march. Now get it."

And new trainees, called "rainbows" because of the flashy civilian sport shirts and sport pants they wear until uniforms are issued, listen apprehensively to the words that begin 20 days or more of grueling discipline under hot Texas sun.

They're led to a nearby dining hall for lunch, dinner, or breakfast depending on the time of day. The TI takes them, roaring at them to stay in step, to "march" together, to keep their heads and shoulders up. He leads them through the doorway and sends them through the chow line. Then he stands alone, his arms folded across his chest, waiting and watching like the foreman of a ranch looking over a fresh bunch of temperamental mavericks.

He gives them time to eat, and then he takes them to their barracks, and on the way they learn more about marching and listening for commands.

He shows them how to make their beds and then he tells them to make their own. He gives them 15 minutes to do it, and he knows they think they can't. If they don't, he reprimands them for not being faster. If they do, he tells them to help someone else who's having trouble and they begin to learn cooperation.

"All right now, Rainbows. You work hard and you work fast in this Air Force. You think you're men now? Show me. Prove it to me. Let me see you work like men now. You don't get anything from me until you show me you can make the grade. No privileges. Nothing. Listen, Rainbows, I'm telling you how to make the grade. Now get it."

The TI isn't friendly because he knows discipline can't be taught by friendship. He knows he may overlook a "friend's" mistakes and the others would lose respect. He doesn't smile because he knows new trainees who must learn obedience would be confused.

Never Right

Nothing the basic does seems correct, he's screamed at for anything and everything, even for wiggling his ear. If he works, the job he does isn't good enough. If he doesn't work, he's loafing on the job.

Basics never please the TI, not at first anyway.

The TI's impersonal manner stops short the new recruit's impulse to be friendly with his instructor and forces him to make friends with other new trainees within his flight. This, the TI knows, is the first step towards building team spirit and team cooperation, both necessities in military living.

For a new flight's first 72 hours, the TI stays with them night and day. Each flight actually has three TIs—a team captain, usually a veteran in the field, and two assistant TIs, fresh out of instructor training school or "upgrading" into the job.

The three work together, taking turns pulling reveille, drilling the flight, instructing in the classroom, and answering the hundreds of questions that crop up every day in a strange new way of life.

"All right now Rainbows. Have you any questions?" "I have a question," the 18-year-old from St. Louis says. "What's the first word out of your mouth, young Rainbow?" "Sir, I have a question, sir." "Sir, how long does it take for mail to get here from St. Louis, sir?"

The TI is "sir" to basics, because it's the only way they'll get used to saying sir.

The actor is tough as he stomps about his Lackland

Basics at Lackland AFB are up at 5 in the morning for calisthenics.

"Don't you understand, Rainbow? Don't you understand that when I say no, it means no?"

stage. He chews often and he chews hard. He demands that recruits be military from the moment they arrive. At the end of the first three days of training, the frustrated trainee feels that he can't do a thing correctly, that it's impossible to please his instructor, and that maybe he isn't capable of making it through the day as a human being.

The TI leads a separate life. He plays no favorites and everyone in his flight is made an example of either today, tomorrow, or the day after.

"All right now Rainbows. Suppose we stop and look at this young man right here. Young man, you were smiling when you were at attention. Young man that is exactly what I told you not to do. Don't you listen; don't you understand when I say no it means no? Don't you understand young Rainbow? Now listen up. I'm telling you how you're going to act. And if you can't act like I tell you, young man, I'm gonna chew your ears right off. Now get it."

This ramrodding role is necessary. In a few hours, it produces a group of men willing to be taught. After the first three days chock-full of constant needling and ceaseless demands, the basic's ready to make the adjustment into the military and he's ready to be shown how it can be done.

This is the attitude the TI has been looking for; now his job is easier.

The first two weeks of training are the toughest for both the TI and the basic. The trainee is up at 5 and in bed at 9. Every daylight hour is crammed with a scheduled class, drill period, or some form of instruction.

Most recruits aren't accustomed to the outdoor life that makes up military training. But good food, lots of it, and letters from home soon counteract the frustration and bone-weary fatigue of the workday.

The basic learns the essentials of Air Force life that he needs to know to get along. He learns to give up luxuries that once he took for granted. He learns to live with a crowd in a barracks and to part with individual privacy as though it were unimportant.

And hovering over him all the while, pushing and pulling under stiff training schedules that never seem to allow enough time, is the TI—a man hated and despised by the new trainee.

Now the Hero

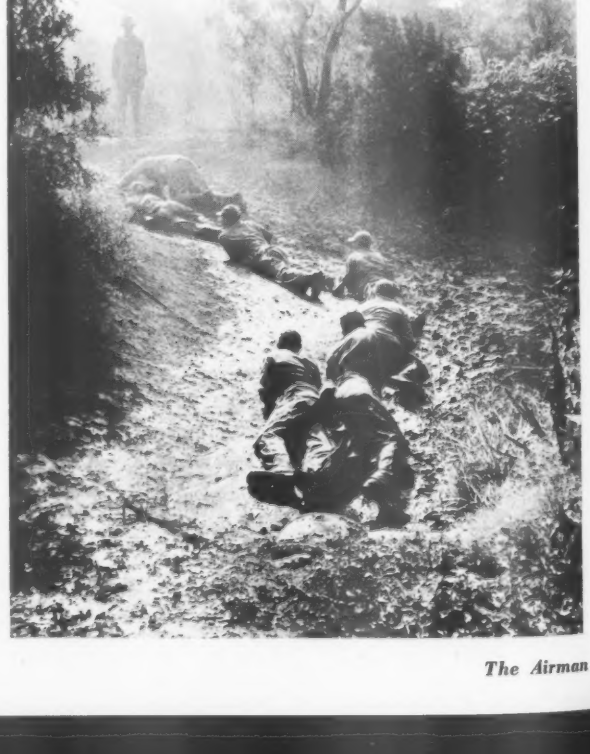
As the weeks go by and the TI has showered his basics with all the little things they'll need to know in the Air Force, they begin to do more by themselves and he takes it easier on them. Fear turns to respect and they begin to gain confidence in the things they do. The TI chews less often and he chews less hard. Occasionally he steps down from his stage and laughs a little—a big day in the life of the basic who never thought his TI could.

Most of Lackland's training instructors are assigned as overseas returnees. When they report to the training base, they enter an eight-week course in the Air Force's Instructor Training School to learn what they'll need to know about lesson planning, techniques of instruction, and the philosophy of education. Big-sounding words to a man who'll spend the biggest chunk of his on-the-job hours dishing out grueling discipline. Yet, the science of teaching is important. Many of the subjects the basic has to learn can't be taught by ramrodding. The TI can bully a man into making a right face and being obedient and saying "sir" when the book calls for it. But he can't bully a man into learning about military law and Air Force organization. He can yell and demand but the trainee can be saying over and over again "I will not listen." The answer? Classroom teaching methods—like the roundtable discussion technique—similar to first-rate teaching on the high school level.

Probably there is no job in the Air Force as difficult and as complex as the TIs job. His days are long and his work is never over. Basics want to learn and he must have the answers to a thousand different questions, some about the military and others about growing up.

There's a stock saying among the Lackland instructor corps that's repeated over coffee cups, in briefings, and any place else where TIs come together: there is no such thing as a bad trainee or a bad flight—only a bad TI.

The typical TI's day begins early in the morning, usually long before sunup. At a little after 5, his basics must be dressed and on the physical training field ready for push-ups, situps, and knee bends. That completed, he takes the flight to the dining hall for breakfast. Forty-five minutes later, the TI marches his flight back to the barracks



Overshadowing TI watches basics bellyclimb a hill to next project of the obstacle course.

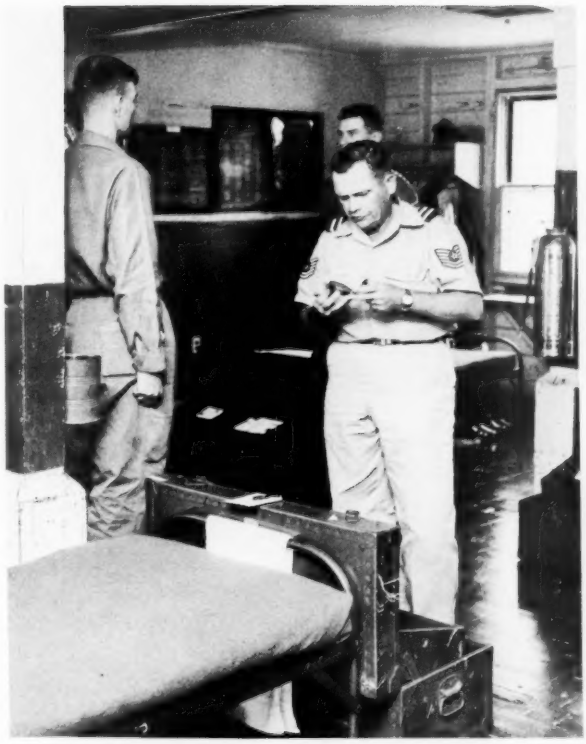
for the making of beds and the spit-and-polish necessary for the morning inspection. At 7, the day's first class takes up in one of the nearby classrooms. Until 11 o'clock, basics attend courses in chemical warfare, character development, and personal affairs, with an occasional inspection sandwiched in on a "free" hour. The TI is there all the while: taking turns instructing in the classroom, and making certain his flight reaches the right building at the right time. Between 11 and 12, the basics have lunch, and then it's drill, and more classes. The day's training ends at 3 o'clock but the TI has reports to complete, briefings to give his flight in preparation for the next day, individuals to select for barracks guard, grounds orderly, and a dozen other trainee duties. At 4:30, he takes his flight to mail call and dinner and on the way, there's more instruction on how to drill correctly.

More often than not, the TI spends the early part of his weekday evenings in meetings called by training officers or the squadron commander. If everything goes well and Lady Luck is on the TI's side, he may reach home before his children are sent to bed.

In many ways, the TI's job is a thankless one: hours are long and the work is difficult. There's no extra pay and days off are few and far between. But rewards of a different kind come to the training instructor. Basics find it hard to keep from liking their flight in basic and hard to forget it when they get out. They find it difficult not to respect their TI for what he's taught them and for the example he's set. Usually in the third or fourth week of training, basics suddenly become aware that their TI has been "acting" and that the role he's played so well has had a purpose. He becomes a hero to the men who have been shown how to get along in the Air Force, and only a scattered few neglect to say thank you when they leave Lackland.

Among the hard-nosed, scowling breed of men called TIs, strange mementos are collected: a thank you card signed by every man of a flight, an ode written by a group of one-time Rainbows, a song composed by a 17-year-old trainee and recorded at the local snack bar by members of a flight.

Perhaps even more important to the individual TI is the personal satisfaction that he feels when one day he sits down to rest and his mind recalls a maverick from Scarsdale who found it nearly impossible to stand at attention without smirking; or a Rainbow from Raleigh who cried himself to sleep in a strange new world; or a trainee from St. Louis whose lifelong ambition was to become an airman. And he knows that somewhere in the Air Force are former Rainbows who are walking straighter or standing taller because of what he taught them in the place called Lackland.



The TI is demanding, and seldom does a "mistake" slide by. Here the TI methodically inspects a foot locker for order and cleanliness.

In third week of training, TIs take their basics on a three-day bivouac. Running an obstacle course, firing on the rifle range, and learning to live out-of-doors are important subjects. Basic in picture wears temporary arm band of Airman Second Class, making him honorary element leader during basic training.

What

by TSgt. John K. O'Doherty

Airman Staff

To many airmen in operational squadrons of the Air Force, the Inspector General is a vaguely mysterious agency somewhere higher up along the chain of command and generally associated—in one way or another—with trouble.

This "trouble" may take the form of inspection teams which appear periodically with notebook in hand to shuffle through the personnel records or tech order files. Some airmen have a picture of the IG as a benevolent sort of functionary in the background of Air Force activity—a sort of combination chaplain, Santa Claus, and Dutch Uncle to whom an individual can look for sympathy and assistance if life starts to give him the business.

Actually, the function of the Inspector General may be more accurately described as the prevention of trouble at every level. The inspection system and the familiar, probing curiosity of the inspectors are essential to the military effort. Their effectiveness can spell the difference between success of the mission and failure.

The very birth of the United States might have been delayed for another generation—and the cost in lives and suffering would have been infinitely higher—had it not been for the work of General George Washington's most famous Inspector General.

The fortunes of the patriots were at a low ebb at Valley Forge in the winter of 1777-78. The Continental Army was a miserable, ill-fed, and ragged remnant when General Washington secured the appointment of Baron Frederick Wilhelm von Steuben as his Inspector General. Von Steuben was a Prussian and a true professional, having learned his business under Frederick the Great during the Seven Years War in Europe.

One of Von Steuben's first acts was to establish a code of military discipline for the inexperienced but courageous citizen-soldiers facing the well-drilled regulars of the British Army. He taught them to deliver sustained and effective fire by training them in the technique of firing their muskets by alternate ranks while the others kneeled to reload.

Von Steuben thought that it was ridiculous for soldiers to be without shoes while snow covered the ground and installed a system of property accounting to control the issue of equipment. In a strange mixture of French, English, and German he loudly expressed his low opinion of

Good Is The IG?

The nosy gentleman with briefcase and checklist performs one of the most productive jobs in the Air Force.

merchants who sold inferior supplies to the Army at exorbitant prices, and who traded with both sides indiscriminately in the process of lining their pockets. The vigor and professionalism of Von Steuben proved to be effective, and out of the winter at Valley Forge came the spirit that turned the tide.

Military science has come a long way since 1777, but the basic mission of the Inspector General and the IG system is substantially the same. The IG is interested in airmen having shoes, and flight jackets, and oxygen, as well as such other things as good food and proper medical attention. He is interested in discipline, in the firepower capability of the units, and in the welfare, loyalty, and esprit of the troops. He also looks into reports of wrong-doing by Air Force personnel.

When the AAF was established in 1942 as a major Army command under General H. H. Arnold, the organization provided for the post of Air Inspector at top staff level with policy making power. The Office of the Inspector General for the Air Force was created in January 1948 under Maj. Gen. Hugh J. Knerr. The traditional system inherited from the Army has been modified considerably to cope with Air Force requirements, with flight safety, police, and security functions added to the Inspector's responsibilities.

Just as inspectorates were established at regiment and brigade level as far back as the creation of the permanent military establishment in 1799, independent IG structures serve the major air commands, numbered air forces, and air divisions. For some functions—notably flight safety—inspectorates are established at wing and squadron levels. The organization pattern differs slightly among the various commands, but the objectives are the same.

Every airman has a link with the IG system through personal conference periods held periodically at all air bases. Through these conferences every man is assured a hearing on any problem peculiar to himself which cannot be resolved by his immediate superiors. Usually the solution to these problems lies in the area of information or fuller explanation, but the IG at base level may pass problems along to higher headquarters if necessary.

The Inspector General for the Air Force is Lt. Gen. Elmer J. Rogers who has been flying since the days of the old Army Air Service in the early 1920s. In the opening days of World War II he served on the War Department General Staff. In the spring of 1944 he was wounded in action in the European Theater of Operations, and, following recovery, assumed command of the 97th Bomb Group, and later became Director of Operations of the Mediterranean Allied Strategic Air Forces. He holds decorations awarded by six different countries, and now travels about the United States at the controls of his own B-57 twin-jet aircraft.

The influence of functions under General Rogers' direction as Inspector General extends throughout the Air Force to the remotest corners of the most isolated installations.

The mission of the Inspector General is to promote maximum effectiveness in the Air Force by exercising constant surveillance over the thousand and one circumstances which might possibly detract from efficiency, and by translating military experience into policies, regulations, or useful information.

The nature of the problem areas of interest to the IG is subject to constant change. Many difficulties of other years have disappeared completely from the military household. Other problems are perennial, and rapid evolution in technology, doctrine, and national policies continues to generate new factors calling for never-ending vigilance.

A report written by the IG at Lake Champlain in 1815 describes a situation which is not likely to occur again. "The great loss of service to the Army is occasioned by the appointment of Regimental Paymasters from the line. These Paymasters have seldom paid their troops oftener than three times a year, frequently not more than twice. The delay in paying troops of this station is a source of much complaint and trouble. Very few have been paid since June 1814 and many for a longer time. Inactivity, mutiny, and desertions are the consequence."

In 1876 the Congress somehow neglected to pass a bill authorizing money to pay the Army. This, undoubtedly, was a nasty blow to morale, but the chances of such a thing happening again are remote. Problems in the age of supersonic aircraft and guided missiles are inclined to be much more sophisticated.

The responsibilities of the Inspector General may be divided into the two broad, general categories of security

Since the earliest days of American history, The Inspector General has been charged with concern for the efficiency, discipline, morale, and integrity of U. S. military forces.

Maj. Gen. Von Steuben

Maj. Gen. Hamilton

Maj. Gen. Von Steuben, General Washington's Inspector General, injected discipline and order into the ragged Revolutionary Army at Valley Forge in the winter of 1777. In 1798 relations with France became strained to the point where some thought war was imminent; Alexander Hamilton assumed the post of IG for the emergency period.

and inspection. Two deputies, the Deputy Inspector General for Security and the Deputy Inspector General for Inspection, supervise a family of directorates charged with responsibility in greater detail.

The directorates charged with inspection are located at Norton Air Force Base, Calif., and it is here that the procedures and criteria for inspections are developed. As a general rule, the IG structures in the major air commands conduct the inspections of their component units in such areas as operational readiness, personnel administration, facilities, chaplain programs, and medical services. The directorates at Norton monitor and evaluate these inspection systems, and when common deficiencies or trends are noted they are designated "special subjects for inspection" and brought to the attention of IGs throughout the Air Force.

The merit of an IG inspection is not measured in the number of "gigs" discovered and recorded. The idea is to examine the degree of compliance with policies and regulations, and local or temporary impediments can often be removed on the spot. Occasionally, inspections will uncover a better way of doing something, and this information may be translated into official policy.

As to the need for these inspections which reach into every nook and cranny of military life: a supply officer during the Spanish-American War grumbled that he "had always run a good, efficient department until this war came along and loused it up." The concept of operational readiness was a bit loose in those days.

In addition to the work in planning and programming, the directorates at Norton conduct inspections of activities which concern more than one command, or which are beyond the capabilities of the command agency. In the areas of procurement and development, surveys are continuously carried on to observe the proficiency of contractors working for the Air Force, and weapon systems are closely examined prior to delivery to the using commands.

The Directorate of Flight Safety Research, one of the best known agencies in the Air Force, is located at Norton, and its work—reflected in the day-to-day operation of every flying squadron—is closely allied with the inspection systems.

Flight Safety conducts special investigations into aircraft accidents, and reviews reports of accidents and incidents from all over the world. Engineering research in the safety of flight, analyses of the human factors involved in accidents, and predictive studies based on experience are but a few of the important functions of Flight Safety. Conferences with key people in the aviation industry, coordination with FAA and other government agencies, and close communication with medical authorities help

Brig. Gen. Marcy

Maj. Gen. Knerr

Brig. Gen. Randolph B. Marcy was IG during the Civil War and when America was opening up the West. He held the position for nearly 20 years from 1861 to 1881. The IG system underwent a broad expansion during the period. Maj. Gen. Hugh J. Knerr, first Inspector General for the Air Force. Earlier in his career General Knerr was identified with the dedicated band of iconoclasts who fought for airpower recognition in the turbulent years of the 1930s.

to promote Flight Safety objectives. The whole is capped by an intensive program of information and education which has paid handsome dividends over the years.

The mission of Flight Safety is to "conserve combat capability," and this goal concerns pilots, crews, maintenance personnel, and everyone else associated with the aircraft. In the earlier days of airpower, the attitude toward flying safety was less realistic and precise than it is today. During the 1920s mechanics would brag that they had never changed a spark-plug in the life of an engine, and the only time that brakes were checked was when they failed. Inspection and maintenance were performed only after trouble developed.

Then in 1925 Maj. Gen. Mason M. Patrick, Chief of the Air Service, noted that the Third Attack Group had flown an unusually large number of accident-free hours. Investigation revealed that Maj. Harvey S. Burwell—later retired as a general officer—had devised an inspection system of periodic maintenance based on preventing trouble. Major Burwell's plan was installed at McCook Field, Ohio, (now Wright-Patterson AFB) as the forerunner of the present preventive maintenance systems. The first Maintenance Inspection Record, ancestor of Form 41B, was a wall chart six feet long by three feet high.

Then, too, young pilots of the roaring 20s were often inclined to confuse genuine flying skill with what appeared to be recklessness. A handful of expert fliers of the time attracted a great deal of attention as they worked to sell the world on airpower by presenting daring exhibitions all over the United States and Europe.

Jimmy Doolittle, the Paul Bunyon of aviation in that era, once flew his Curtiss *Hawk* under a bridge spanning the Danube at Budapest as the result of a dare by a young officer of the Hungarian Army. (Doolittle was a civilian at the time.) Although the exploit took place in the half light just before dawn, the coffee houses were buzzing with the story by noon. The American diplomatic representative to Hungary wrote a report on the incident to his superiors beginning: "I would do little to belittle Doolittle, but . . ." While such a feat was within the capabilities of an expert, it could not be accepted as an example for the new crop of up-and-coming aviators—if the crop was expected to mature.

The record of the Tactical Air Command for the year 1958 provides an eloquent testimonial to the accomplishments of flight safety programs at all levels. The figures are provided by Col. Harvey L. Case, Jr., Director of Safety for TAC.

In 1953 when TAC flying was about equally divided between tactical aircraft and troop carrier operations, the accident rate was 28 per 100,000 flying hours. In 1958 tactical flying in the command was up to 80 percent—

using the hottest aircraft in the Air Force inventory—and troop carrier flying down to 20 percent. The accident rate was less than 17—and this in spite of the fact that TAC was charged with an additional training mission for pilots from NATO, South America, Pakistan, and Nationalist China.

More than ever before, with technological advances following each other in rapid succession, safety is a prime factor in engineering design from the first preliminary sketch on the drawing board. But in fairness to maintenance men generally it must be recognized that TAC and other commands are still flying aircraft every day that are more than 15 years old. Imagine how many 60-2 bounces the landing gear of a gooney bird must absorb in 15 years.

Some of the areas of responsibility charged to the Deputy Inspector General for Secuirty are fairly well known to members of the Air Force. The Assistant for Security Plans and Policy develops and distributes the "word" pertaining to classified information. The familiar AFR 205-1, *Safeguarding Military Information,* and all its family of changes are based on Federal laws applying to all government agencies plus the product of a continuing distillation of Air Force problems and experience.

An official concerned with 205-1 at headquarters level makes an interesting observation: "Show me a man who knows everything contained in AFR 205-1 and I will show you a man who has wasted a lot of time that might better have been employed at something else. The trick to using 205-1 is to refer to it when any question arises. Nobody's memory is that good."

Perhaps not so familiar to the operating Air Force is the Industrial Security Division of the Provost Marshal's office—also under the Deputy IG for Security. Industrial Security is concerned with classified defense information in the hands of commercial contractors engaged in manufacturing or other work for the Air Force. This program affects thousands of civilians and hundreds of plants, from Boeing's giant industrial empire with 70,000 employees to the small business man with a hundred or so people working on a sub-contract.

The scope of this broad security system entails close coordination with a number of other military and civilian agencies of the government. Security in peacetime is a matter of people, and it is just as important in the civilian end of the defense team as it is in the uniformed services.

Before any corporation can be given a defense contract involving classified information, the corporate structure of the company must be examined from a security standpoint. This examination includes information on owners, directors, managers, and principal executives—and any personnel changes in these key positions must be reported as they occur.

Further, every contractor must agree, in writing, before the deal is closed to establish a security system in his operation sufficient for the protection of classified material. It is the responsibility of the contractor to see that security regulations are disseminated among his employees, and that procedures are established and followed. In larger corporations, such as aircraft and missile manufacturing plants, this may involve an extensive educational program for the workers, including manuals on security, film strips, lectures, and company bulletins.

Every compromise of security—even if wholly unintentional and presumably harmless—must be promptly reported as well as all cases of suspected sabotage or espionage. All workers requiring access to classified material must hold a security clearance commensurate with the degree of classification involved.

Air Force security inspectors pay regular visits to these defense plants to examine and evaluate security measures. Every aspect of the operation is of interest to Industrial Security, from the company guards at the gate to the security clearance of the girl reproducing classified documents for use by engineers and technicians.

In case of repeated or serious violations of the security agreement, Air Force contracts may be cancelled—and there are cases on record where just this has happened. In addition—if circumstances warrant—security violations by contractors or individuals may be turned over to the Department of Justice for prosecution under the Espionage Act. There are people in Leavenworth today who failed to heed what Von Steuben said nearly two hundred years ago about dealing with both sides.

In addition to Industrial Security, the Provost Marshal

is responsible for policies and procedures governing law enforcement, correction, and installation security throughout the Air Force.

Prior to 1941 there was no regularly appointed Provost Marshal General or corps of military police in the American military structure. In the "old Army" military police was roster duty like interior guard; sometimes an entire company or battalion would be assigned to military police duty for a period.

But the history books show that the Congress appointed a Provost Marshal—Provost Martial he was called—at various times, usually to cover an emergency. In 1778 Congress appointed a Provost Corps "to be mounted on horseback, and armed and accoutred as Light Dragoons." The mission, according to an old book, was to "apprehend deserters, marauders, drunkards, rioters and stragglers."

In the period of the Civil War and again in World War I a Provost Marshal General was appointed with a primary mission of operating the draft laws, plus a number of added, allied police functions. It was not until World War II that the concept of a permanent, specialized law enforcement-security corps was adopted.

Just as in the case of other directorates and divisions of the Inspector General, the Provost Marshal does not exercise command control over provost officers or air police units at lower echelons. The Provost Marshal provides technical supervision over law enforcement, and in such areas as improvement of discipline, military traffic control, treatment of prisoners of war and military prisoners, and the application of security regulations to military installations.

The USAF Installation Security System, developed and prescribed by The Provost Marshal, is designed to safeguard weapon systems and other equipment committed to combat readiness. Rigid standards and specific procedures are established for the physical security of USAF installations, missiles, and special weapons. Thus The Provost Marshal insures that combat forces are safe from acts of sabotage intended to "keep them on the ground" in the event of an attack. Every airman plays a part in this vast undertaking.

Across the table from the Provost Marshal—on the opposite side of the organization chart—sits the Director of Special Investigations. The Office of Special Investigations (OSI) conducts investigations of major crimes committed against the Universal Code of Military Justice, and looks into the background of Air Force personnel requiring clearance to handle classified information.

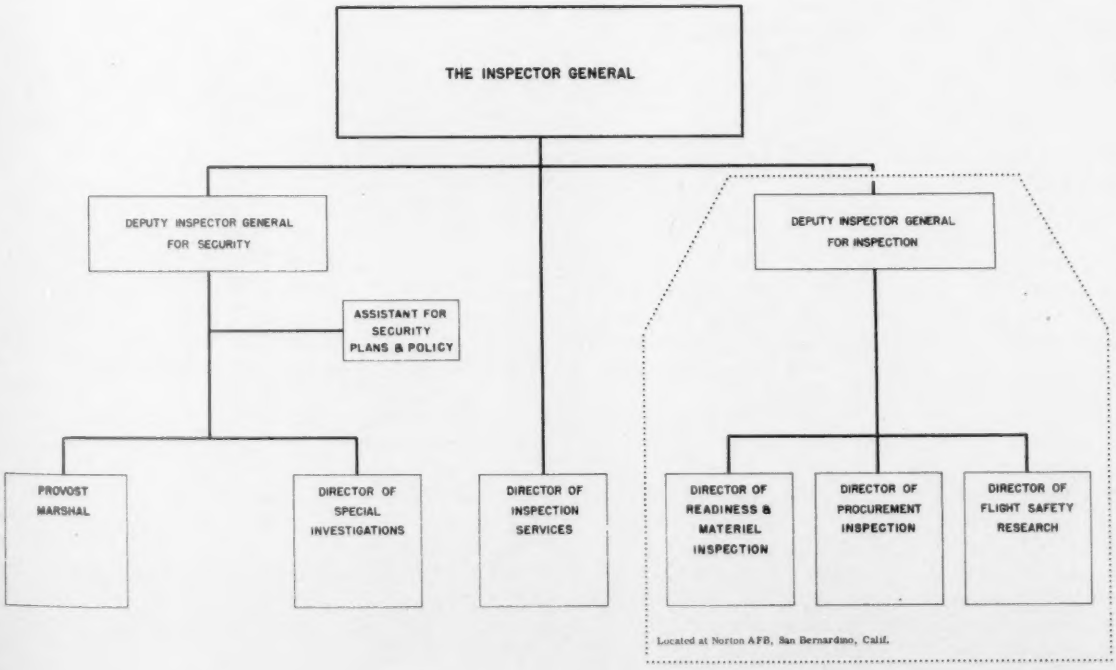
Many functions of OSI have the color and flavor of the very best fiction on crime detection and international intrigue. Other aspects of the operation, however, bear a painfully close resemblance to simple, everyday hard work.

The OSI is a worldwide organization serving wherever the Air Force has interests or responsibilities. It is an investigative instrument, as distinguished from a police organization, and it works in close coordination and harmony with such bodies as the FBI, Scotland Yard, MI-5 of the British Military Intelligence, the French Surete Nationale, and a number of others.

But the story of OSI cannot be told on a single page, any more than one can paint the barn with but one stroke of the brush.

Let it suffice for the moment to include OSI among the inventory of navigational aids used by The Inspector General to keep the Air Force flying right.

Other stories on the functions of The Inspector General will appear in future issues of The Airman.


THE INSPECTOR GENERAL
DEPUTY INSPECTOR GENERAL FOR SECURITY
ASSISTANT FOR SECURITY PLANS & POLICY
DEPUTY INSPECTOR GENERAL FOR INSPECTION
PROVOST MARSHAL
DIRECTOR OF SPECIAL INVESTIGATIONS
DIRECTOR OF INSPECTION SERVICES
DIRECTOR OF READINESS & MATERIEL INSPECTION
DIRECTOR OF PROCUREMENT INSPECTION
DIRECTOR OF FLIGHT SAFETY RESEARCH
Located at Norton AFB, San Bernardino, Calif.

COMPTROLLER OF THE AIR FORCE

1st in a Series on Air Staff Functions

SONG of SIXPENCE

FEW things are more thought provoking for the average man this time of the year than his annual income tax return. After sleepless nights and doodled pages of figures he still can't remember all the things he spent that much money for, nor how much of it was deductible. The whole mess gives him one big headache.

If the average taxpayer gets a headache keeping track of his income and out-go, the Comptroller of the Air Force must have a double migraine every day. Last year Congress appropriated $18.7 billion to run the Air Force. The Comptroller exercises responsibility for budgeting and accounting for this appropriation. He keeps and balances the books. He is directly under the supervision of, and directly responsible to, the Secretary of the Air Force and has a concurrent responsibility to the Chief of Staff, USAF.

The Comptroller doesn't control anything, least of all Air Force money. All his staff agency does is collect the facts and information used by the top management staff—the Chief of Staff and his deputies—so that they can decide how much to spend and for what. Facts and information are natural products of a comptroller's activities: budgeting, finance and accounting, statistical services, management analysis, and audit. And although any Air Force commander is advised on money matters by his staff comptroller, only he, himself, can determine utilization of resources. The comptroller's job is to see that programs and plans of his commander are followed from funding to payment of bills.

That's where his Director of the Budget comes in. Sometime in January of every year each operating agency is told approximately how much money it can expect to get for operations and maintenance based on the amount included in the President's budget. At the same time each operating agency is asked to submit its financial plans within the limitations provided. The operating agencies are also asked to list those items that will not be accomplished because of non-availability of funds.

By the end of March all the financial plans are at Headquarters, USAF. Each commander must be ready and able to justify his plan—prove his management ability—before a Working Group from the Budget Advisory Board. This Working Group is chairmanned by someone from the Director of the Budget's shop, with voting members from other directorates concerned with funds in their own Air Staff agencies at the USAF level.

The Working Group reviews the financial plans, then makes recommendations to the Budget Advisory Board, composed of representatives from the major Air Staff agencies concerned. After the Budget Advisory Board finishes its review, the now consolidated plan is submitted to the Air Force Council, then to the Secretary. Thus the budget directorate assists, monitors, and coordinates the staff action, but never controls. By June the overall Air Force Financial Plan has been revised and approved at Department of Defense level and by the executive branch's Bureau of the Budget. By the beginning of the fiscal year, July 1, budget authorizations have been issued and allocations for the first quarter have been made to the commands.

Because of the ever changing demands of the space and missile age the Financial Plan is revised as necessary each quarter to keep the Air Force program dynamic and flexible.

The Directorate of Statistical Services also gets into the financial act. Through its worldwide reporting system it collects and processes status of funds data in the operations and maintenance area which is mechanically compared to the appropriate financial plan. Summary financial status reports are prepared for the

use of the Budget Advisory Committee during the quarterly revisions to the financial plans. In addition, it develops reporting procedures for and processes a multitude of reports on personnel, materiel, operations, etc. which are designed to facilitate good management. The central data processing center—the electronic brain—for Headquarters USAF is operated by this directorate.

The Directorate of Accounting and Finance has a big job, too. The development of policies, procedures, standards, and requirements pertinent to all accounting, disbursing, and financial reporting falls to this directorate. The job is so big that an AF Accounting and Finance Center, which ranks as a major command, was established at Denver, Colo., to exercise surveillance over the accounting and finance operations of the Air Force. Although organized like a separate command, the center works in accordance with the policies and systems guidance furnished by the directorate. In addition to its accounting responsibilities, the Accounting and Finance Center is the Air Force bank—it pays, on order, from funds given it to meet the bills.

The Directorate of Management Analysis is a sort of watchdog for all echelons. It provides an objective, across the board viewpoint for management considerations; however, management decisions are made by the responsible operating official. This directorate collaborates with other Air Staff offices in the development and preparation of planning factors for use in programming, planning, budgeting, and analysis. It develops the financial requirements for costing long-range plans. Working with the office of responsibility, it establishes standards of performance and coordinates on proposed plans and programs with an eye for better management; it analyzes progress being made against program objectives and does all manner of management research.

Then there is the Auditor General, responsible for the audit organization throughout the Air Force. In a sense, the Auditor General measures the financial health of the entire Department of the Air Force and makes appropriate recommendations for the correction of weaknesses disclosed by audit.

If one phrase could describe the keynote of this whole staff agency, it would be: service to the rest of the Air Staff.

Shooting the Breeze

Everything's Relative

"You gotta go easy on this equipment. Your taxes pay for it, you know."

During WW II, the still familiar plea to "take care of your equipment" was just as real and equally loud. One of the classic stories concerns a Lockheed P-38 *Lightning* pilot in England.

He had just returned from a most successful mission over the Continent where he bagged four enemy aircraft — one ME-109, two Macchis, and one JU-52. To add to its conversational worth, he had turned the trick in less than three minutes.

While jubilantly making his report to intelligence, an irate ordnance officer stormed into the debriefing room and confronted the victorious pilot.

"Lieutenant," he shouted, "how many times do we have to tell you how to shoot guns?" There was a brief silence before another pilot offered the information that the stunned victor had scored four kills.

The ordnance man was not to be sidetracked. His righteous anger had been aroused. Four gun barrels had been burned out and that was a serious matter. "I don't care how many planes he knocked down," he continued. "What I care about is the four gun barrels that are now junk. You guys are going to have to learn to shoot in short bursts—not long. Don't you realize you're destroying valuable government property?"

☆ ☆ ☆

Unsociable

Then there's the famous story of the Air Force bird colonel in the Pentagon who declined a coveted invitation to the annual Wright Day dinner in the Nation's capital city.

By way of explanation, he told his associates, "It's no use. I've been going faithfully for the last three years, and neither of those guys has ever shown up."

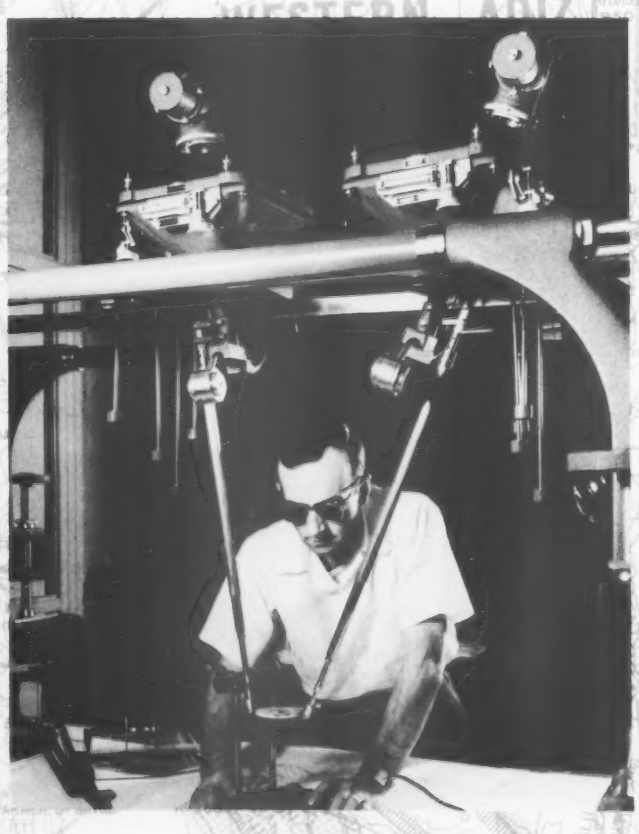
TRAILBLAZERS IN THE SKY

by Mel Kramer, Hqs, ACIC

BETWEEN the Earth and the Sun, there exists a network of invisible sky highways. Their road signs are radio and light beacons, check points on the ground that a pilot can see to pinpoint his position, stars from which he can establish his whereabouts, and radar which increases the accuracy of his orientation. Other electronic devices and systems are being developed to even improve on this accuracy.

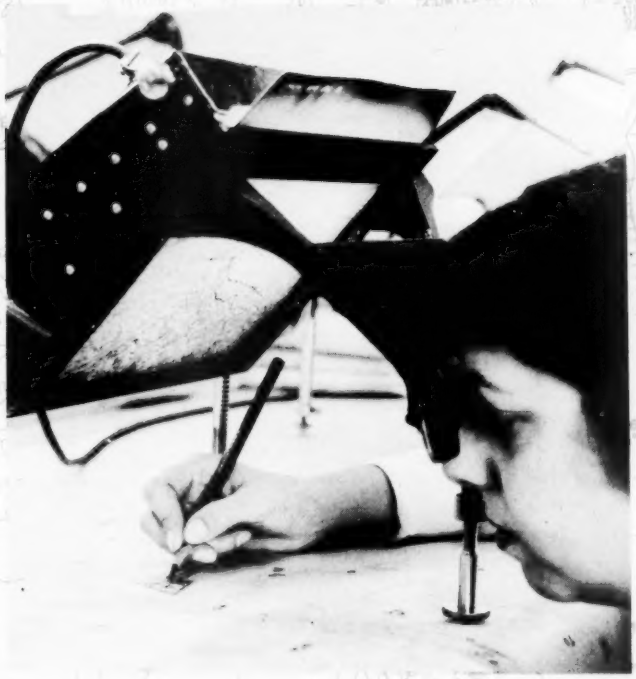
To tie these road signs together, charts for specific aerial operations are compiled and published. For United States Air Force operations, in particular, this mission is accomplished by the Aeronautical Chart and Information Center, a function of the Air Photographic and Charting Service under the Military Air Transport Service.

With its headquarters in St. Louis, Mo., the center is the hub of a collection, research, production, and distribution activity that radiates worldwide to squadrons and detachments in Washington, D. C., Germany, England, France, Spain, Alaska, Panama, Hawaii, Japan, and Guam. Here is the picture story of how more than 3,000 skilled military and civilian technicians are producing the 100 million or so charts shipped from the center each year.



The *pilot* of the stereo plotter—goggles and all—skims over a three dimensional world, supplied by aerial photographs. He records what he wants of all that he sees from his lofty perch—carefully watching his altimeter that records the varying elevations of the land over which he passes. The line of his flight is transferred to the chart base beneath.

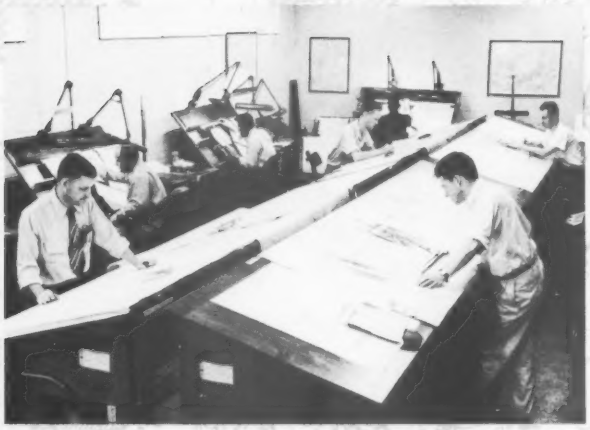
Getting the information out of the photograph and onto the aeronautical chart is done with the sketchmaster. Like a tricycle sitting askew on three legs, the machine is adjustable to simulate the actual altitude of the camera aircraft. Ground details are transferred from the aerial photograph to the controlled chart base. Now, all of the guide posts previously set down by others, guide the hand.



↑ Simply by squinting at aerial photographs through the photo alidade and accomplishing the surveyor's usual mathematical gymnastics, thousands of square miles are surveyed in an hour—from an armchair. Thus contours and elevations are mass produced for aeronautical charts.

Paper templates are transformed into copies of steel and joined into a spider-like object. Pins are driven through the maze of intersecting arms and legs transferring the geographic control points in the metal templates onto the plastic base of the oversized future chart.

← Aerial photographs are basic source material for aeronautical charts. The control selector, like a bio-chemist, searches for ground control points appearing in the pictures. She marks these locations to link the many ground features in the photograph to a definite geographic point. They are then precisely coordinated in proper continuity.



In the control section technicians add more ground reference. The more the better, for every reference added is another guide post for the chart makers themselves. They must find their way before their charts can show the way to others.

When all the information is compiled, line drawings are etched into the emulsion coated plastic plates from which lithographic printing plates are made. After touch-up, the plates are ready for the presses.

Finally the ultimate user makes practical use of the chart.

TALL TEXAN

by M/Sgt. Ed Blair, *Airman Staff*

"No ma'am, our lettuce is gone for a while. Sure, all the fresh eggs you want . . . tomatoes? No, we don't start picking them again until Tuesday . . . yes, plenty of beans and peppers, corn and cucumbers too . . . how about some nice mustard greens?"

Just listening to this one-sided telephone conversation you would naturally conclude that Ben Jennings is a farmer. But to look at his 200 pounds in Air Force fatigues you would just as naturally conclude that he is a master sergeant. Both your conclusions would be right.

M/Sgt. Benjamin F. Jennings, USAF, is a food service supervisor working out of his AFSC while cultivating a 250-acre farm, tending 6,500 laying hens and six scrawny, half-wild pigs.

The farm he manages supplies all the fresh eggs and nearly all of the produce and vegetables consumed on Clark Air Base in the Philippine Islands. After the dining halls get what they want, the officer, NCO and airmen messes buy much of the surplus. The rest goes to a produce concession at the base commissary. Flight crews from less fortunate Far East bases are good customers too. And every month after the books are tallied, the base nonappropriated fund council finds that Jennings has made another profit from the operating funds furnished him.

"It all started with a little garden that another mess sergeant had out behind dining hall No. 8," Jennings told THE AIRMAN. After I took it over the captain told me to find another spot. I did. It sorta spread out to this," the sergeant waved an expansive arm. "It sure ain't no garden now. Even down where I come from we'd call this a farm."

Sergeant Jennings grew up on a farm near Ft. Worth, Texas.

"It finally got so that I was spending more time down here on the farm than I was in my office at the dining hall, so they just assigned me to the farm for duty. Having fresh eggs and produce out here in the Orient means a lot to the troops, guess they thought I could be spared from the kitchen. I have an assistant now, S/Sgt. Ed Smith, who looks after things when I'm not here.

"We grow just about anything that you would back in the states—corn, peas, okra, tomatoes, peppers, radishes, cucumbers, greens, and melons—just about whatever you name. Of course some of our crops don't do too well at first—we have to experiment to find out what grows best on different parts of the farm. The vegetable crops are getting better all the time. We'll probably cultivate another 100 acres next year.

"The biggest item is eggs though. Our poultry really pays for the operation of the farm. On the local economy fresh eggs cost about a dollar a dozen. We have 6,500 hens laying an average of 300 dozen eggs a day. We sell them for 65 cents a dozen. In a few more months we will have 20,000 layers and can reduce the cost to around 40 cents a dozen. The feed bill now runs around $2,500 a month."

The nonappropriated fund council, which finances the farm, was a little skeptical of Jennings' poultry farm idea a year and a half ago. The sergeant wanted to buy eggs and incubators to hatch his own chicks but the council was cautious about buying such unorthodox equipment for Air Force use.

"Guess we just didn't have any farmers who knew about such things on the council," explained M/Sgt. C. C. Arnett, NCOIC of the fund council.

The council did agree to spend $984 to fly 5,000 one-day-old chicks from California to the Philippines. But more than 1,300 of the chicks died en route. Undaunted, Jennings slowly built up his flock with chicks hatched out by the now-grown hens and those he bought locally from Philippine sources.

"We get a lot of helpful advice from the Philippine Department of Agriculture—information about poultry diseases, vaccination, and such," said Jennings. "We help them out a little once in a while by cooperating with their agricultural experiments. We work very closely with all the local people."

Sergeant Jennings' forecast of 20,000 laying hens pro-

Soil tests, then actual seeding, are the only ways to find out which American vegetables will grow on the Clark farm.

ducing cheaper eggs is based on a more recent decision of the enlightened and enthusiastic fund council. Incubators have been ordered, and once operating, they can hatch out another 6,000 chicks every month. That not only means that eggs on Clark AB will be cheaper and more plentiful, it also means that there'll be chicken every Sunday—or more often—on the serving lines.

With this reproduction rate Jennings and his poultrymen will be able to cull the laying flock to the point where the hen who doesn't produce her quota of at least one egg per day will lose her head and an airman will gain a drumstick. They will also be able to control and crossbreed the chicks with sturdier and more adaptable local strains of poultry. A good part of the additional 100 acres Jennings plans to cultivate this year will produce chicken feed.

The penciled planning sketches that hang on the wall of his iron-roofed, screened-in office indicate that there will be some new buildings too. Planned now are six poultry houses, a feedhouse, and an egg processing and storage building. All eggs are carefully washed, candled, and graded before they are boxed and ready for issue to kitchens and customers.

Both the present buildings on the farm and those proposed, cost the Air Force nothing because the thrifty and efficient Jennings just doesn't like to see anything wasted. Nearly all his building materials have been salvaged from the huge base that incorporates nearly 160,000 acres. People who know Jennings say that he knows more about what is on the base and where it is than any other person there.

Right: Eggs, produced by the 6,500 healthy laying hens, center right, are washed and graded under watchful supervision; pay for the operation of the whole farm.

Ben gives a lot of credit for the farm's success to the loyal cooperation of the 34 Filipinos who work for him. He didn't buy this loyalty either because his average monthly payroll is around $2,300 per month—about $75 per man. The loyalty stems from his very genuine liking for the Filipino people and his willingness to help them when they need help.

Last summer fire swept through the only three municipal buildings in a small town nearby, leaving city officials no place to do business while they raised the necessary funds to rebuild their offices. Sergeant Jennings solved the problem for them. He knew where there was enough scrap lumber on the base to build a framework and enough canvas tarpaulins, only slightly mildewed by the ever-present Philippine humidity, to house a city hall's offices. The base commander, Col. James K. Dowling, and the salvage officer OK'ed the loan and within hours the job was done. That's another town where American airmen are welcome and M/Sgt. Ben Jennings is a hero.

The Filipino guards on the base gladly keep a sharp eye out for pilferers at night. It was they who discovered the vandals raiding the sweet potato patch nightly—an old wild sow and her pigs. That explains the presence of a pig pen on the farm now. The old sow was butchered for a squadron party and the shoats are fast becoming domesticated by dining-hall scraps.

"They're really not part of the farm," Jennings says. "It would take a lot of hogs to feed home-grown pork to the people on the base. But they don't cost us anything there in the sty, they aren't raiding the fields, and they will make nice sqaudron barbecues. Besides, they make a good advertisement there—enough people might become interested in porkers that we might be able to buy some good breeding stock and raise part of our meat too. Just a thought, doesn't cost me anything to think big."

Thinking big seems to come natural to Jennings. One of the latest ambitions—now that he has the local Boy Scout troop set up in a camp of their own he helped them build—is to build and stock a good riding stable. Would help morale, he argues, since Clark's recreation is limited almost entirely to base activities.

Chances are by the time you read this Clark will have a riding academy. Jennings is particularly interested in the younger people and envisions a skating rink for them which he believes he can build for a few dollars. He would probably recruit all his labor force from the scouts and riding enthusiasts he has already helped. Jennings has so many irons in so many fires that it is hard to see how he finds time to study. But he does.

While getting the farm into full operation he has completed six USAFI and ECI courses. Beside some agricultural courses "to help my farm experience get some exercise," he has taken English, personnel, OCS, purchasing and contracting, and mess management courses.

"You see I'm in a soft core field and I don't think the Air Force has many farms that need me to run them. So I gotta look out for my next assignment; still got three years before I retire. Anything I learn helps because the same management principles apply when you are a supervisor in any job. The books just help me manage better."

Jokingly, Jennings tells that he got worried about overmanaging about six months ago. That was the day an important looking staff car pulled up in front of his office unannounced. The car had an air police escort big enough to make an honor guard. That many APs surely spelled trouble. He was certain it did when the base commander, Colonel Dowling, accompanied by his staff and some of Jennings friends on the fund council, climbed out.

But it turned out all right. The colonel had just come to pin a Commendation Ribbon on Ben Jennings' fatigues. It took only a few minutes. Even the colonel knew how busy a farmer is at harvest time.

Management principles are the same whether running a dining hall or a farm. Jennings can do both.

AERIAL TRIUNE F

TACTICAL mobility combined with air defense readiness and global air logistics last September when F-104 *Starfighters* of Air Defense Command's 83rd Fighter-Interceptor Squadron deployed via MATS to join a Tactical Air Command Composite Air Strike Force on war-threatened Formosa.

Needle-nosed *Starfighters*, stripped of wings, nose cones, and empennages, were tucked neatly in the giant bellies of MATS C-124 *Globemasters* and were flown across the Pacific to a Chinat airfield.

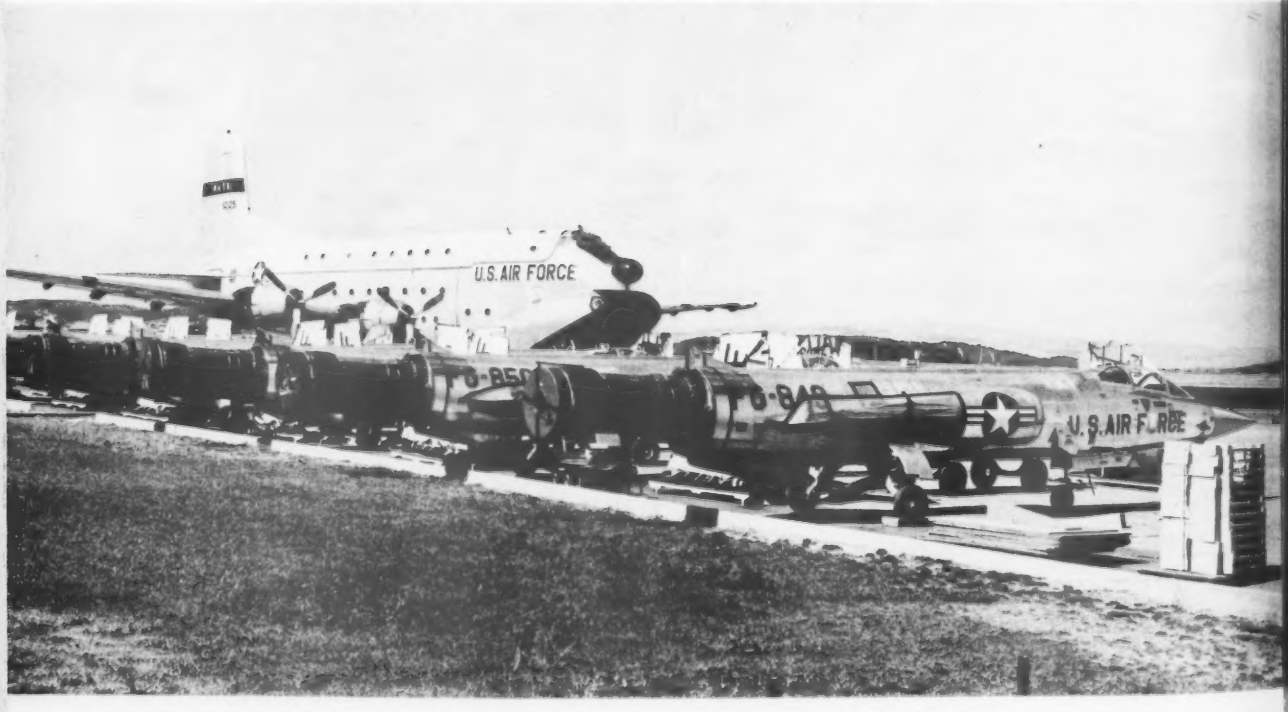
Nicknamed "Jonah Able," the operation coincided with the movement of other Century Series fighters dispatched from Okinawa and the Philippines by 13th Air Force. Tactical Air Command F-100s, F-101s, and B-57 jet bombers rounded out the Pacific Air Force's strike force which sharpened the teeth of American foreign policy in the tense Quemoy situation.

The first heavily-laden C-124 *Globemaster* lifted off the Hamilton AFB runway early on the morning of September 7 to begin the squadron's overseas transfer. With precision timing, transports arrived at Hamilton every six hours to load pre-planned and pre-positioned aircraft and cargo. All told, a fleet of 18 C-124s was required to airlift 450,000 pounds which included 12 F-104s, spare engines, and other cargo.

For every two C-124s sent on their way, one MATS C-97 took to the air with flying personnel, maintenance men, and technical representatives.

By September 10, the last of the 83rd's ground support men were on their way, and by September 13, the last cargo plane was en route. Within 24 hours after their arrival the first *Starfighter* was test flown, its characteristic whine heralding the success of the triunal effort and signalling to Communist China that reinforced American airpower was on hand.

Globemaster waits to take on its load of one stripped-down F-104A *Starfighter* at Hamilton AFB, Calif.



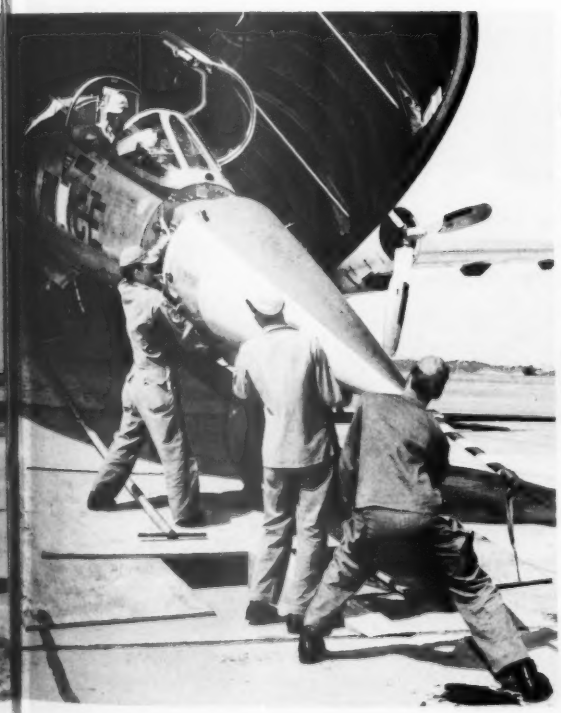
FOR PEACE

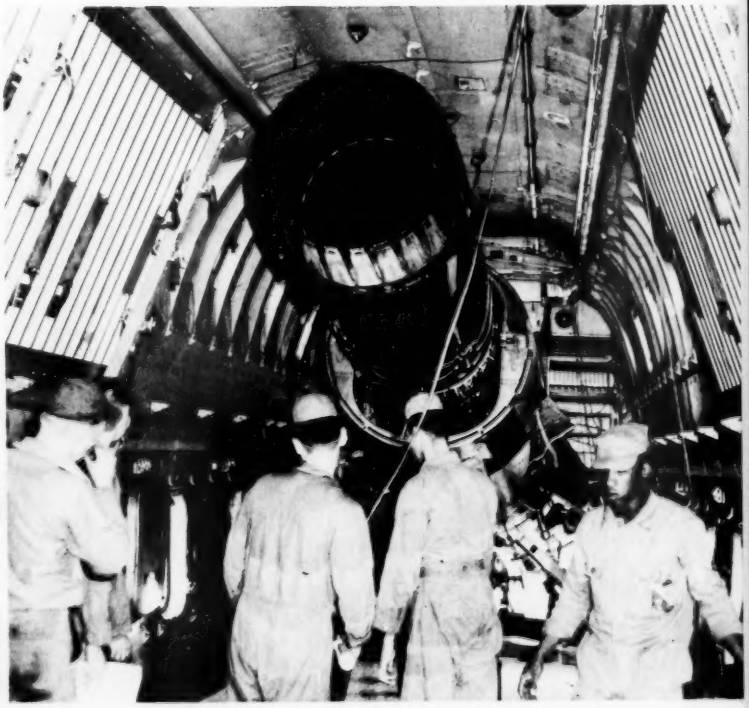
By M/SGT. PIERCE W. TIMBERLAKE, Hamilton AFB, Calif.

Crew chief rides his plane in.

Nose cone is removed from first F-104A while plane is being loaded. After this one, nose cones were removed prior to loading.

Cavernous interior of the *Globemaster* is filled after *Starfighter* is loaded.





He died in a gallant effort.

In the Name of Congress

No. 7 IN A SERIES

TWO BY SEA

by SMSgt. Hal Bamford

The all-American Western Task Force, 35,000 strong, began pouring ashore on Africa's west coast the morning of November 8, 1942. Unknown to most, two men prepared for a special mission at the northern extremity of the invasion line.

"THIS was a desperate venture, but desperate ventures never went for lack of volunteers, and eventually, I selected two. Maj. Pierpont M. Hamilton of my staff had spent many years in France. He had been a pilot in World War I. He was a man of great dignity, fine appearance, and definite personal charm. He had been with me in England, and was thoroughly conversant with every detail of *Torch* planning. Col. Demas (Nick) T. Craw finally persuaded me to allow him to accompany Hamilton. I hesitated long for Craw commanded the air contingent. Craw was a man of good appearance and persuasive personality. He had been in the Balkans and Greece when the Germans entered and had wide acquaintance among foreign officers including Frenchmen. His presence, background, and peculiar fitness for the assignment led me to consent to his undertaking the mission."

So wrote Lt. Gen. Lucias K. Truscott in *Command Missions, A Personal Story*. With these words he described the prelude to one of World War II's earliest and most amazing dramas; a mission which was to result in the award of two Medals of Honor and the death of one of the AAF's most promising officers.

Spring 1942 had blossomed with new hope in Europe. Although the Continent was tightly locked in the grip of Hitler's vise, there was cause for optimism among the Allies.

President Roosevelt's Arsenal of Democracy was no longer a mere supply depot, but a rumbling giant, shocked into snarling action by the stunning blows of Pearl Harbor. The end of a discouraging third year of European war was rapidly approaching, but the dawn of the fourth seemed to bear promise of the beginning of the end.

An answer to Rusisa's clamor for a second front was the principal problem facing Allied planners. Great as was the desire to strike directly across the Channel, it soon became evident that a substitute plan was needed to ease the pressure in the east.

After discarding a number of plans, late July brought a decision for *Torch*, an invasion of North Africa. Planning and preparations immediately went into high gear. Three principal thrusts were decided upon, two on the north coast, a third on the west coast.

Shortly after 0100 hours on November 8, troops began pouring ashore east and west of Algiers, easternmost of the selected sites. Almost simultaneously, the Center Task Force struck near Oran. Both were combined British-American operations. Resistance ceased within hours near Algiers, and on the second day in the Oran area.

The west coast phase could almost be classed as a separate operation. Under the best of circumstances, weather conditions were normally exceedingly bad off this coast. High seas and a rolling surf were the rule rather than the exception. Even as late as the afternoon of November 7, reports from submarines in the landing area were gloomy. Failure here could jeopardize the entire invasion.

Consequently, the relief felt by Allied commanders was understandable when reports indicated the invasion was on. Post invasion reviews indicated that November 8 had produced the calmest seas in this area in 68 years.

The western invasion, under the command of Gen. George S. Patton, was a three-pronged attack. The main force went ashore at Fedhala, 13 miles north of Casablanca. A second struck at Safi, 130 miles south, and

He aided in arranging a surrender.

the third made their assault at Mehdia, 80 miles above Casablanca.

The thread of hope that the French would not resist was a constant factor throughout *Torch* planning. With this in mind, western landings were withheld until 0400 hours to allow broadcast of messages from President Roosevelt and General Eisenhower, urging French cooperation.

General Truscott, commanding the northern thrust, feared these messages might not reach commanders in his isolated area, and thus conceived his daring supplemental plan for personal contact.

A letter was prepared explaining the invasion, and calling upon the French to cooperate. Translated, it was lettered on a scroll in Old English-style type and bound with ribbons and seals. Word was circulated asking for two volunteer officers to carry the document to the French commander. From the dozens answering the call, Craw and Hamilton were selected.

As debarkation proceeded the two volunteers reported for last minute instructions. They were dressed in their best uniforms, brass and leather gleaming, ribbons and wings adding a dash of color. With best wishes of the tense staff they were lowered to their landing craft which housed a radio-equipped bantam truck and driver. As they pushed off, contact with them became confined to the radio and a walkie-talkie, added at the last minute.

Frequent calls to the ship indicated that the trip in was routine, but as they reached their selected landing point near the mouth of the Sebou River, gunfire from the enemy and our own Navy forced them to abandon this part of their plan. The craft turned south, paralleling the shore, and was finally beached at a point where many other troops were pouring inland. The ramp came down, and the bantam moved off. Within seconds it had bogged down in the churned up sand, and the trio was forced to leave their vehicle and search for another. The last word received on shipboard was that they had secured a second bantam and were "proceeding on mission."

The next 48 hours passed without word from or about the special mission. Finally, two French soldiers, loyal to the Allied cause, slipped into the American lines and were escorted to headquarters which had moved onto the beach. They reported that Colonel Craw had been killed and Major Hamilton was being held by the French garrison in the Kasbah Mehdia. His French captors were afraid to release him because the mission had traveled under a flag of truce, and they feared killing Craw, under such conditions, would result in severe retaliation.

Late that afternoon, November 10, General Truscott moved up to a forward command post and, while there, received word that the local French commander and most of his men had been captured. He desired to contact General Truscott to arrange an armistice with the balance of the forces. The general refused even to talk to the captive commander until Major Hamilton was released.

Early the same evening, Major Hamilton was brought to the airfield at Port Lyautey and immediately established contact with his headquarters by radio. Through him a meeting was arranged for the following morning with the French area commander. During the night, the French received cease fire orders from Admiral Darlan, their commander in North Africa, and the following morning, November 11, General Truscott accepted the surrender at the meeting arranged by Major Hamilton.

In retrospect, the mission can hardly be called a complete success. Yet, it was through the contact efforts of Major Hamilton that the armistice meeting was finally arranged.

Ten weeks later, the War Department published a special order awarding the Medal of Honor to Major Hamilton. Another six weeks elapsed before a similar order was cut citing Colonel Craw for his part in the strange mission. They were the eighth and ninth such decorations to be awarded to Air Force men, the first of World War II in the European-Mediterranean theater, and the first ever honoring airmen on a mission in which aerial action was not involved.

The citations were basically the same. Colonel Craw's read:

"For conspicuous gallantary and intrepidity in action above and beyond the call of duty. On 8 November 1942, near Lyautey, French Morocco, Colonel Craw volunteered to accompany the leading wave of assault boats to the shore and pass through enemy lines to locate the French commander with a view to suspending hostilities. The request was first refused as being too dangerous but upon the officer's insistence that he was qualified to undertake and accomplish the mission he was allowed to go. Encountering heavy fire while in the landing boat and unable to dock in the river because of shell fire from shore batteries, Colonel Craw, accompanied by one officer and one soldier, succeeded in landing on the beach at Mehdia Plage under constant low level strafing from three enemy planes. Riding in a bantam truck toward French headquarters, progress of the party was hindered by fire from our own Naval guns. Nearing Port Lyautey, Colonel Craw was instantly killed by a sustained burst of machine-gun fire at point blank range from a concealed position near the road."

Today, Pierpont M. Hamilton is a resident of Santa Barbara, Calif., a major general in the United States Air Force Reserve.

Roadmap for Your Future

by Capt. Ted R. Sturm
USAF (Ret.)

"Parties who want milk should not seat themselves on a stool in the middle of a field in hope that the cow will back up to them."—Elbert Hubbard

OFTEN, during the early and somewhat precarious years of adjustment to Air Force life, young officers experienced what might best be described as a sense of disorientation. It is a disturbing feeling, occasioned by uncertainty evolving from each new assignment.

Because of the wide latitude inherent in "exigencies of the service" officers were never absolutely sure whether in their initial years, they would be supply men, administrators, personnel specialists, etc. Thus, with some trepidation, they pondered the problems of a new job. *What will it be? Will I like it? Can I handle it? Where will it lead, career-wise?*

In the past, the answers to these questions were usually obtained *post facto* and the resultant impact upon morale, retention, efficiency, and service to the Air Force too often was far from desirable.

Recognizing that such a situation created a career path which wound its nebulous way askew of the personal ambitions of the individual and the personnel requirements of the Air Force, planners began work several years ago to correct the obvious deficiencies of the system. The result is a program of officer career management which in January was implemented by Air Force Regulation 36-23.

Essentially, the new program provides broad guidance for the assignment, utilization, and career management of all Air Force officers. It is a mature program, befitting the new maturity of the USAF.

As announced by Lt. Gen. Emmett O'Donnell, Jr., DCS/Personnel, the program consists of two major elements. First is a new Officer Career Management Structure (OCMS), which regroups all Air Force officer specialties into career patterns composed of *utilization fields* and *career areas*. The second element consists of policies on career development and utilization, spelled out in the regulation to provide definitive guidance for career progression.

Essence of the OCMS is its homogeneous grouping of specialties which are compatible and conducive to the transfer of skills and knowledge.

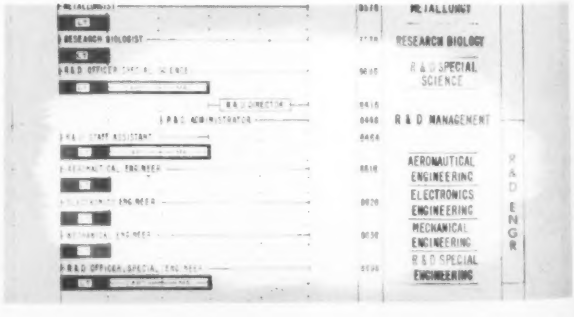
Although broad, as most policy statements must be, the two elements of the new program have an immediate and specific applicability to individual officers. Take a new second lieutenant, who will serve as an example of how the program works.

Initial Assignment

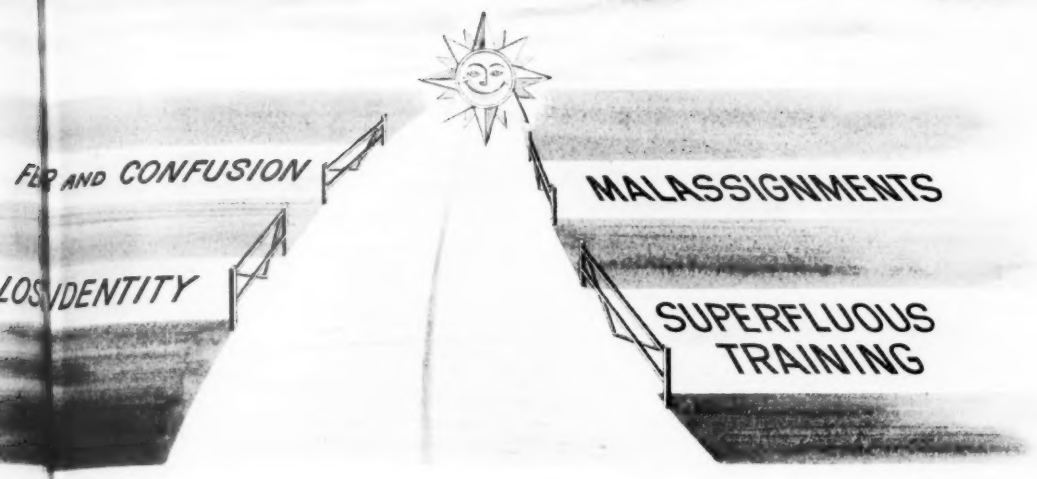
Our man takes his oath and dons his bars, which, coupled with his degree in aeronautical engineering, makes him a prime candidate for an Air Force career. First off, he learns that under the officer career management structure, he will be assigned and developed in one of the following categories:

1. *Operations Career Area,* comprised of those utilization fields and specialties directly required to employ the weapon systems in the accomplishment of the primary operational mission of the Air Force.
2. *Scientific and Engineering Support Career Areas* (all areas except the Operations areas are called Support Areas), comprised of scientific, research and development, and engineering areas.
3. *Technical Support Career Areas,* containing areas of materiel, comptroller, administration, security, and other functions of a technical and administrative nature.

There is another area, called the *Professional Career Area,* which includes legal, chaplain, and medical utilization fields; obviously not pertinent to our new officer.



Magnified is our lieutenant's logical place in the Air Force scheme of things. Note that with his aeronautical



engineering degree, he would be placed to the left of the chart in the scientific and engineering support career areas, further narrowed down to the research and development area and pinpointed specifically to AFSC 8616, aeronautical engineering utilization field. There are other fields to which aeronautical engineers could be assigned, but they are closely related. Thus, the doubts which beleagured generations of the lieutenant's predecessors are dispelled for our young officer.

So far, so good. But what if the Air Force is short of personnel officers when he arrives for assignment? Won't matter. If the base commander needs personnel officers, and the Air Force doesn't have them, they assign someone from the other (right) side of the chart; someone with a background more akin to personnel work than an aeronautical engineer.

What the lieutenant will do now and for the next several years is mapped out for him by the second element of the program, which, to reiterate, establishes "policies on career development and utilization to provide definitive guidance for career progression."

USAF believes officers should be specialized somewhat narrowly during the early years of their careers to develop technical competence and acquire a sound foundation for further career progression. This is essential to those who will further specialize. Likewise it serves as the base upon which to build broader utilization for those developing as broadly qualified officers. Broadening utilization should be commensurate with these officers' increase in experience, grade, qualifications, and capability, while officers whose qualifications, capabilities, and desires indicate they can best serve as specialists should be utilized and developed career-wise as such. However, after initial specialization, those who are capable and desire to progressively broaden, should be encouraged to do so.

In a few years, when he becomes qualified in his narrow, specialized field, the lieutenant could expect to be promoted. When he is, and through the grade of major, he can then expect to break out of his specialized utilization area and gain more and broader experience in related utilization fields. When he becomes a lieutenant colonel, he may be considered for assignment in any of the career areas on his (left) side of the chart. For colonels and generals, there are no limitations on assignment.

What did our rapidly advancing officer just do? While he was a lieutenant, the *maximum desirable utilization limits* held him in the *utilization field* containing his primary AFSC.

While he was a captain and a major, he branched out, but was still limited to utilization fields within the *career area* for which he was best qualified. As an L/C, he could have been assigned anywhere within the scientific and engineering support career areas, but chances are, he would remain within, or close to, the area of best qualification.

Or if the need existed and the officer so desired, he could have remained in his highly specialized area, and worked up to colonel without leaving it. USAF planners think there will be many cases like this, particularly in scientific and research and development career areas.

As AFR 36-23 points out, "The Air Force officer inventory must at all times include both *broadly experienced officers* who are qualified for senior command and managerial positions, and *technically competent specialized officers.*"

Note that the program makes no change in classification procedures as established in AFM 36-1. Only the functional *concept* and arrangement of officer specialties contained in the manual have been modified.

How About Flying?

Our lieutenant's path to success has appeared cut and dried, but suppose he also desires—and is qualified for—pilot training? He may wonder, "To pursue pilot's wings and subsequent flying duty, must I forego assignment in the field of engineering—the profession for which I have devoted many years of preparation?"

Here lies the synchronous flexibility of the new program. As a rated officer, he simply follows a superhighway called *dual progression.*

For the rated officer, his aeronautical skills represent his primary qualifications, overriding—temporarily—all others. His first assignment when he finishes training,

will be to the Operations Career Area, within which he can expect a "cockpit" job and to become fully qualified and combat ready.

He could, of course, remain in the operations area throughout his career, but the Air Force encourages dual progression. As the regulation states, ". . . generally, rated line officers are required across the entire Air Force structure, exclusive of the Professional Career Area, to provide the rated know-how and leadership acquired in tactical assignments."

Further, "rated officers must maintain their aeronautical skills throughout their Air Force careers. They should also obtain as much experience and knowledge as possible in support activities."

So the rated officer can look forward to two possibilities: (1) continued association with the Operations Career Area progressing into command and staff positions, or, (2) assignment and experience in one of the support areas with a possible return to assignments in the Operations Career Area. This is a rotational policy between "desk" and "flying" positions much like the practice which existed in the years immediately prior to the new program's implementation.

As an engineer, our lieutenant should plan for an alternate assignment in his Engineering Support Career Areas. Had he been a business administration or other social science graduate, he of course would have been assigned to the Technical Support Career Areas after becoming operationally qualified in the Operations Area.

If his education was incomplete, he could still increase his educational qualifications through the many facilities available for this purpose.

Superiors and Commanders

Recognizing that one of the cardinal functions of commanders and supervisors is the perception of talent or potential coupled with the desires and ability to develop it for the future as well as the present, the program provides for briefing all officers on the new regulation. It also provides for counseling of each individual by the person who prepares his effectiveness reports. In his normal role, the personnel officer is also obligated to provide personal assistance to the commander and the individual on matters of career development.

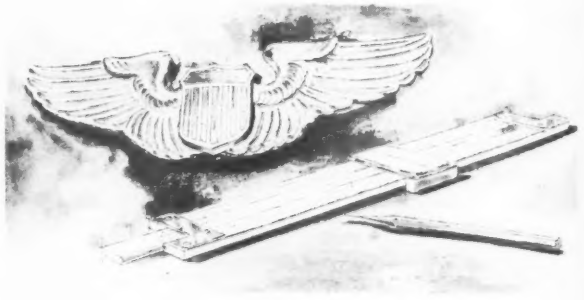
Hq USAF emphasizes that the new program is a guide, rather than an edict. "Obviously, operational requirements govern the utilization of officer resources. Our first responsibility is to man the Air Force to the highest state of combat readiness to meet the needs of the Air Force as circumstances dictate."

The program does not prescribe that permanent change of station movements be made. However, where improved utilization and career development can clearly be served by so doing, change of assignment with no change of command or permanent change of station is encouraged.

Best Ideas

Commenting on the new program, General O'Donnell said it incorporates the best ideas of commanders and staff officers on career development.

"Adoption of the program will result in a significant

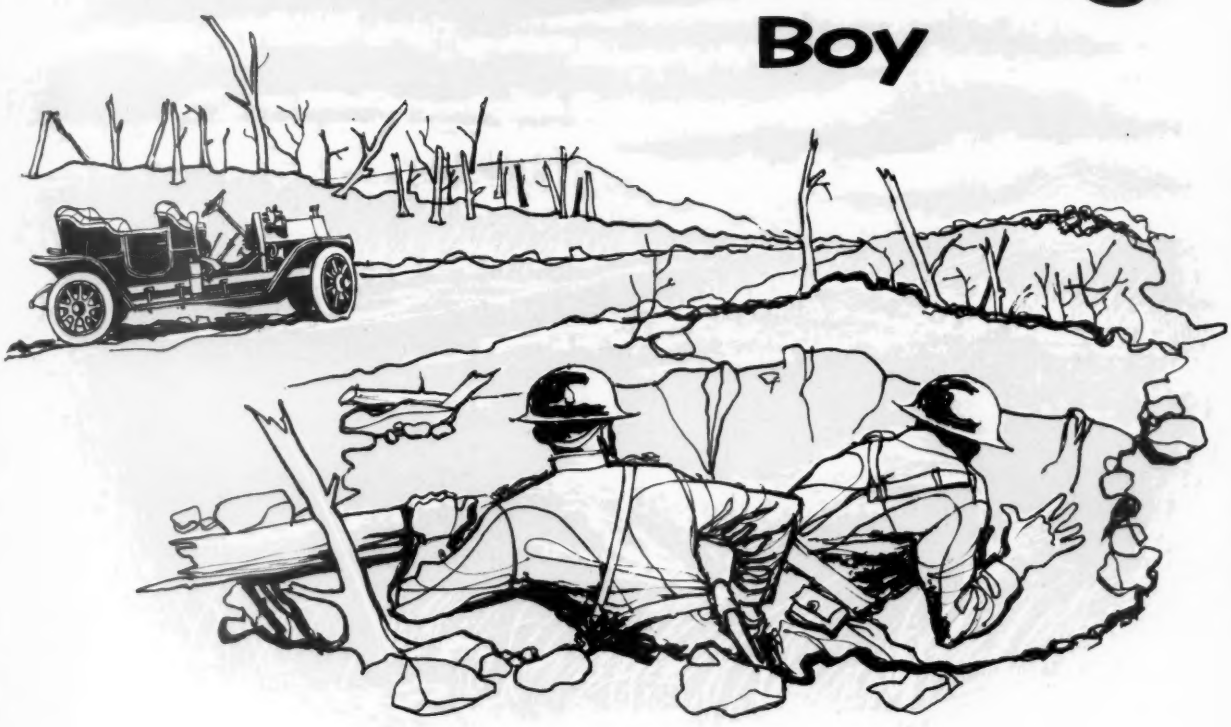


improvement in officer utilization," he explained, "but most important, the long-range benefits will be in the development of the younger officers who are the professional officers of tomorrow. . . ."

To the young officer in our story, the road ahead is no longer obscure. So that his progress will not be impeded by unnecessary deviation, USAF clinches its program with the statement that "career development actions must be recognized in the day-to-day command and staff operations of the Air Force. They must be supported by commanders, supervisors, and personnel officers alike when considering applications for education, selection for schools, initial assignment and reassignment actions, utilization, evaluation, classification, and other pertinent personnel actions."

Yet with all of this, and as emphasized in the program directive, no officer can expect to relax and let the tide of these policies wash him to success. He must, in fact, work harder and more efficiently to gain any advantages at all from the program. And he might well consider the words of Elbert Hubbard, noted author, who relevantly remarked: "Parties who want milk should not seat themselves on a stool in the middle of a field in hope that the cow will back up to them."

Apron-String Boy



by T/Sgt. Harold L. Craven, *Airman Staff*

IF A nine-year-old-boy with a reputation for timidity hadn't succeeded in climbing a church steeple in 1887, Allied casualty lists in World War II probably would have been longer, and Bolling AFB, D. C., home of Headquarters Command, USAF, would have another name.

The boy, Raynal Cawthorne Bolling, was better known to his schoolmates as "Apron-string Boy." He was a frail child who avoided any game more strenuous than hide-and-seek, and this lack of courage prompted his father to give him some sound advice:

"Find the bravest deed you can think of, provided it is not a dishonorable deed, and do it regardless of your fears. Once you have decided on the deed, don't back down, for if you fail you will have less courage than before. If you succeed, however, you will have won a victory over fear. One act of courage can change your entire life."

Raynal took the advice. As far as he knew, none of the boys had climbed the church steeple. Climbing it would be a courageous act. He fought back fear and labored to the top. From that day on he was master over his fears and took every opportunity to engage in new adventures. He learned to ride, climb mountains, paddle a canoe and hunt wild game with a pistol. Although he had no way of knowing it then, eventually he was to use his skill with the pistol to save a man's life.

Young Bolling did not permit his newfound love of adventure to interfere with his education. He completed elementary and high school with excellent grades, then went to Harvard College and earned his bachelor's degree in only three years. After that he attended Harvard Law School. In 1903 he joined the legal staff of U. S. Steel and in 1907 he became that corporation's assistant solicitor general.

At U. S. Steel the young lawyer became a crusader for safety and disability compensation, and his extraordinary success in achieving his goals in these areas soon spread to subsidiary firms, then to companies outside the steel industry. If Bolling had done nothing more, his life would still have been one of significant accomplishment. But destiny held yet another important role for Raynal Bolling.

In 1907 he became convinced that Americans were paying too little attention to National security, and he felt duty bound to enroll in the New York National Guard for military training. He quickly became dissatisfied with 19th Century methods of warfare, and he took advantage of every opportunity to speak before groups of influential persons in an attempt to awaken the Nation to the need

for stronger, more efficient, military and naval forces.

Automobiles and flying machines were in their infancy, but Bolling was convinced that these devices had military potential. And the airplane, like the church steeple he had climbed in his boyhood, was a personal challenge. He was afraid to fly. Therefore he must accept the challenge and become an aviator.

In 1915, after Germany sunk the British ship *Lusitania* with the loss of 1,200 persons, the Harvard Club in New York, of which Bolling was a member, expressed its anger by organizing a business men's military training camp. Bolling saw the camp as an opportunity to demonstrate his ideas of modern warfare. He wanted an aero squadron, but for financial reasons this was out of the question. But he was certain he could organize a fast-moving motorized machine gun company.

Bolling was not without influence, due to his position in American industry, and many of his associates, particularly Philip A. Carroll, organizer of the training camp, were equally influential. Soon a dozen machine guns were turned over to the group by the Army, Navy and National Guard, and 15 motor vehicles were borrowed from various manufacturers. The Army provided further assistance by detailing one of its machine gun experts, Capt. William R. Smedburg, Jr., as Bolling's right hand man and observer for the Army.

Eventually, with the aid of funds raised by the Aero Club of America, several planes were obtained and men of Bolling's machine gun unit learned how to fly. They became the National Guard Aero Company and eventually the First Reserve Aero Squadron. The squadron later gained fame in Europe as the 26th Pursuit Squadron.

When the squadron was transferred to Army jurisdiction for overseas service, Bolling was given a desk job with the Aircraft Production Board and Carroll became squadron commander. Despite promotion to major, Bolling was greatly disappointed. He tried to get reassigned to his old outfit, but because of his vast experience in industry and his knowledge of U. S. production capabilities, his requests were turned down.

Major Bolling was then sent overseas to help coordinate Allied aviation matters and to determine the best ways in which American production facilities could be utilized. The assignment was handled brilliantly, and Bolling was elevated to colonel while performing these duties. He earned the Distinguished Service Medal and the French Legion of Honor as a result of his work.

When reorganization within the American Expeditionary Force resulted in transfer of Bolling's function to the office of General Foulois, AEF's chief of air service, Bolling hoped for flying duty at the front. The War Department had other plans. The colonel was to be recalled to Washington for an important post on the General Staff. But the wheels of reassignment turned slowly, and in the interim the colonel was sent to serve with the British Air Service to study their methods. On March 26, 1918, he decided to inspect Harbonniers Aerodrome which was in the path of the German offensive.

Colonel Bolling and his chauffeur, Pvt. Paul Holder, found the airfield evacuated and decided to head toward the enemy lines. At Estrees they inquired as to the location of enemy forces, and three English officers estimated them to be three miles away. The estimate was wrong. Bolling and Holder encountered a German machine gun nest some 300 yards farther along their route. The Germans opened fire.

Holder tried to turn the automobile around, but bullets put the motor out of commission. Bolling yelled "Jump!," and both men dived into shell holes. They stayed low and waited.

After some 15 minutes the machine guns stopped firing. Then two German officers appeared at the edge of the shell hole. One of the Germans fired twice at Holder, who was unarmed and unable to resist, as he lay there waiting to see what action Bolling would take.

Colonel Bolling started firing with his revolver, killing one German officer, and was instantly killed by the return fire of the other German. The Germans left, assuming that Private Holder was also dead. Shortly thereafter German infantry occupied the territory and Holder was taken prisoner.

Bolling's disappearance was a mystery until April 18, 1918, when on information received through Switzerland, the Red Cross reported that he had been killed. Two months later a German airplane flew over British lines and dropped the brief note:

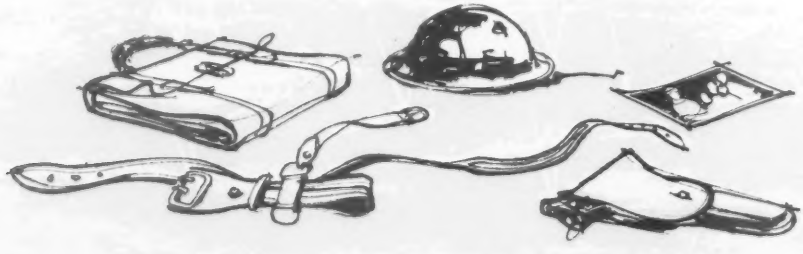
"R. C. Bolling Colonel Amerikaner gefallen."

In July 1918 a new aviation facility near Washington, D. C. was named Bolling Field in honor of the colonel.

On January 14, 1919, the full story of Colonel Bolling's first and final military battle was told in an affidavit prepared by released prisoner of war Holder. His detailed account of the action ended with these words:

"I certify that Colonel Bolling was killed in an endeavor to defend himself and me."

Raynal Cawthorne Bolling had climbed his last church steeple.



Proficiency

Photo by T/Sgt. O. A. Gracia

AIRMAN'S WORLD

Proficiency among USAF crews is a must, and to attain it takes long, hard hours of practice. Firing "hot" guns at aerial tow targets is one of the better ways of simulating actual in-flight gunnery problems. Usually forgotten when kudos are handed out after a successful mission are crew members of the tow target aircraft although their jobs are essential. Here, A/3C George MacFeggan, Naha AB, Okinawa, tow reel operator of a B-57, makes a pre-flight check of the target release mechanism prior to a practice gunnery mission. (See, *They Went That-a-Way,* March, 1959 issue.)

THROUGH OTHER EYES

S/Sgt. Prajob Sriyingyong, Thailand Air Force, recently returned to his native land after successfully completing the Radar Repairman Course at Keesler AFB, Miss.

In itself, this is not news. Many hundreds of foreign exchange students have trod the same path before him, but Sergeant Sriyingyong chose to express his appreciation in a slightly different manner.

The following is a letter received by the USAF Foreign Liaison Office from the sergeant, shown here with the flag of his homeland.

"I have often seen the American way of life in the movies and sometimes read about it in books and magazines or heard about it from people who have been there.

"I used to daydream about going to the United States, but I never thought this dream would ever come true. But by a stroke of good luck, my Air Force selected me to come to school here, and lo—my dreams became a reality.

"I was not disappointed. What I imagined about this country was true. I felt happy to see all these farms, cattle, the desert with strange plants, orange groves, vineyards, and many other things too numerous to write here.

"When I arrived at Keesler, I was impressed by the kindness of the fellow airmen. Everybody was very nice to me. I knew about the customs and life of the American soldiers and learned that some things are much different from the Thailand Air Force.

"In school I was amazed by the huge buildings, with many, many classrooms and plenty of training equipment. This school is a good example for any other school you will find in the world.

"I am sure that anybody who graduates from this school will be a help to the mission of the Air Force as I will take my new knowledge with me to Thailand and thus fulfill the aim of the United States—help my country grow. In my opinion, Keesler is the most famous school in the world in every respect.

S/SGT. PRAJOB SRIYINGYONG"

CLARIFICATION

Misinterpretation of the terminology "under medical treatment" is leading to a wave of applications for replacement of clothing rendered unfit by dieting.

Hq USAF recently issued a letter in an effort to clarify the misunderstanding. It points out, for example, that there is general agreement among medical personnel that most cases of obesity are caused by overeating and not by organic or glandular diseases. Overeating is an intemperance and USAF cannot accept extra liabilities which result in the correction of such an intemperance, despite the fact that dieting may be prescribed and supervised by the surgeon.

The letter concludes, "It should be clearly emphasized to participants at the initiation of all weight improvement projects that the rewards do not include the support of claims for uniform clothing replacement or alterations."

SKATER'S WALTZ

A novel ice-skating act culminated a recent flight of Capt. T. A. Wilson, a flight leader in the 455th Fighter-Interceptor Squadron at Wurtsmith AFB, Mich.

Shortly after takeoff from his home station, he was informed the nose gear of his Northrop F-89 *Scorpion* was angled 45 degrees to the right. All attempts to shake the gear into proper alignment failed.

After a ground-to-air radio huddle, all parties agreed that ice would best serve as an emergency landing strip. Firemen were called upon to spray a six-foot wide, 2,500 foot-long area on the runway. The water froze almost instantly and Captain Wilson safely "skated" his plane in.

COMEBACK! Mr. William Beck (center) recently received his first jet ride and also his first ride in a military aircraft since leaving the service in 1919. He served as a *Jenny* flight instructor during WW I. Pilot for the unique flight was Capt. William D. Johnston, McClellan AFB, Calif. (left). The crew chief, S/Sgt. William DeLeon, stands by to assist Mr. Beck with his pre-flight preparations.

MISSILE PRACTICE

Rapid developments in the defensive missile field demand continued practice on the part of pilots to maintain their proficiency. But in these days of high-priced targets and even higher-priced missiles, it is also necessary to economize.

USAF has disclosed a new invention which will be utilized in such practice missions at anticipated savings estimated at $2.5 million annually.

Dubbed a "proximity scorer," the money-saving device will be installed in the target and will electronically record the nearness of deliberate practice misses.

Recent conversion of two Boeing *Stratojets* to drone status is a case in point. Use of the pilotless bombers would be prohibitive if they were to be destroyed during practice missions. By the same criteria, pilots would be unable to measure their accuracy if they could not determine their margin of deliberate error in missing these targets.

Installation of the new equipment solves both problems by saving the aircraft for future missions and providing a method of scoring pilot accuracy.

The 8.5-pound unit may be mounted in either a towed- or free-flying target and surrounds it with electro-magnetic radiations. When the missile passes near the target, the radiations are reflected, triggering a relay which transmits the miss-distance to the "attacking" pilot or to ground-observers. Comparisons between this data and the firing plan indicate the degree of pilot accuracy.

THREE'S A CROWD

A recent report from scientists on T-3, a floating ice island, contained a very unscientific entry.

Two members of the group, David Craven and Gerry Cabaniss, were working in a seismographic hut when they noticed a polar bear, largest and fiercest animal in the Arctic, approaching.

They quickly dashed to their nearby quarters, got a rifle, and from a respectful distance watched the bear climb atop the recently deserted hut. After a brief consultation, the two decided to detonate a small charge of TNT near their unwelcome visitor in an effort to hasten his departure. The ruse was only partially successful. The giant ambled off some hundred yards and halted.

Deciding it was safe to return to the hut, but packing the rifle as a convincer, the two started back to their seismographic equipment. Their huge white friend, his curiosity once again aroused, also retraced his steps.

Craven, deciding that science could not wait forever, took careful aim, fired a single shot, and watched the visitor topple over dead.

His daily activity report noted the fact "the hut would have been awfully crowded for three," and concluded with the terse statement, "All other activities, routine."

"BUGGER" TO ACE

Most men are pinball artists at heart. Consequently, the introduction of a machine, bearing close bloodlines to the lighted monsters, for aircraft identification training at Ramstein AB, Germany, has met with enthusiastic approval.

Housed in the 514th Fighter-Interceptor Squadron's snug operations trailer, the compact "game" is used as a training aid, and gets more than its share of attention, thanks to an accompanying scoreboard.

Only one pilot at a time can operate the viewbox. Seated in front of the unique gadget, he faces two buttons, marked "Friend" and "Foe," which are, in turn, connected with lighted panels atop the box. As the machine is placed in operation, photos of aircraft flash on a viewing screen for two-second intervals during which the pilot must make a selection and push one of the buttons. If correct, the panel bearing the word "ace" lights; if wrong a loud "bugger" sounds and lights flash to record the error.

Invented by Lt. G. A. Turner and M/Sgt. J. B. Suggs of the 514th's intelligence office, the machine was built from spare parts by personnel of the communications section. It is completely transportable and photos in the box are changed periodically to complicate the problem.

A squadron "treat" awaits the first pilot to record a perfect score in the continuing "game."

BITS OF BLUE

. . . New APTs in selected ladders of several career fields will be offered during the August and September testing periods. Those affected include Communications Operations (29), Aircraft Accessories (42), Utilities (56), Food Service (62), Supply (64), and Printing (71)

. . . USAF officials have announced that the educational level of airmen reached an all-time high during 1958. Ten years ago, 56 percent had less than a high school education. This figure has now dipped to a new low of 27.5 percent. Companion figures also reveal that while only 6.1 percent could point to any college credit in 1948 today 13.5 percent fall within this category.

. . . USAF's Capehart family housing program has made substantial progress since its inception in April, 1956. Latest figures reveal that more than 11,000 units had

BITS OF BLUE - Cont'd

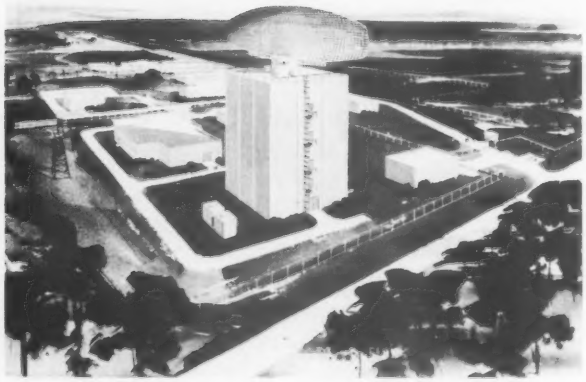
been completed by the close of 1958, and forecasts for the current year estimate that a total of approximately 38,000 will be available by December 31.

. . . At the same time, housing officials announced completed design improvement plans for approximately 30,000 Wherry units as part of the effort to raise these to acceptable USAF standards. Improvements are already underway on more than 20 percent, and the balance will be scheduled as additional funds are made available.

. . . Maj. Ralph S. Parr, Jr., one of USAF's Korean jet aces, was recently presented his 20th decoration at Tyndall AFB, Fla. Credited with 10 MIGs during his combat tour in Korea, Major Parr's latest award was the Air Force Commendation Medal "for outstanding and meritorious service while assigned to Vincent AFB, Ariz., from February 1954 to July 1958."

. . . Air Defense Command has announced locations for its first three squadrons of Mach 2 Convair *Delta Dart* F-106 interceptors. The units are expected to be in place by late spring or early summer and will be based at McGuire AFB, N. J., Geiger AFB, Wash., and Andrews AFB, Md.

. . . Elimination, "with prejudice," of sizable numbers of retrainees from training courses has brought a strong recommendation for punitive action up to and including the loss of a stripe. Hqs USAF has defined the grounds for such action as that over which the trainee has personal control, i.e., improper attitude, continued absences, and inattention in class. Headquarters recommended that the demotion procedure be adopted as standard in the future.



This artist's conception illustrates the Thomasville, Ala. AC&W station as it will appear when it becomes a part of the SAGE system in the near future. Already under construction, the unit will encompass several buildings housing radar equipment, electronic gear, personnel, machine shops, utilities, heating, air conditioning, and electrical distribution systems. The giant antenna topping the concrete tower weighs more than 80 tons.

YOU ASK IT

Q. My AFSC is 29130 (Teletype Operator), and I would like to retrain into another field. Could you advise me of the proper procedure?

A. As presently established, the program does not provide for retraining from the three level of any skill unless there is no five-level within that career ladder. The 29 field does have a five-level skill classification; therefore, 29130 is not considered a resource skill for retraining.

Q. I would like to keep check on my AFSC so that in the event it becomes surplus I may immediately volunteer to retrain into another field. Can you tell me the best place to obtain current information on the status of my career field?

A. Periodically, a supplement to AFR 39-9 is published which lists surplus AFSCs throughout USAF. If yours does not appear on the latest listing, you may be assured it is not surplus. Additionally, from time to time, DSC/Personnel, Hqs USAF, sends to all commands revised listings of resource skills eligible for retraining purposes. A periodic check with your organization personnel office can keep you current with this list and the status of your career field.

Q. In March, 1956 my AFSC was changed from 43171A to 43171C by board action after successful completion of OJT. I would like to know if I will now be required to take a proficiency test under the provisions of the new Quality Control Program?

A. Yes. According to the officials monitoring the program, if no APT score appears on your records, you must take the appropriate skill level test. Retesting will also be required for all airmen whose APT score is below the established minimum for their respective grade.

Q. I recently transferred into the Air Force from the Marine Corps. Additionally, I served with the Merchant Marine during World War II. May I wear the decorations which I received during these previous tours on my Air Force uniform?

A. AFR 900-10 governs the wearing of awards and decorations. According to the provisions of this regulation, service awards from other military services may be worn on the uniform. However, awards from Government agencies other than military may not. In short, you may wear your USMC decorations, but not those earned during Merchant Marine service.

Q. I left the ZI on October 15, 1958. Will my tour length be determined under the old or the revised policy?

A. The new policy went into effect on October 1, 1958. All USAF personnel departing for overseas after that date will serve their tours under the new policy with the possible exception of instances where their return would place them ahead of people serving under the old policy. In this event, the commander will use his own discretion.

RETRAINING REPORT

Complete two-year returns on the retraining program indicate an increasing success.

More than 18,000 have completed their training since January 1, 1957. Of these, 3,500 were NCOs in the program via the directed route; the remainder were volunteers.

Nine career fields supplied the bulk during the two-year reporting period. Supply (64) led all others with 2,075 training out although eight other fields also had more than 1,000 applicants. These included Food Service (62), Administrative (70), Transportation (60), Personnel (73), Aircraft and Engine Mechanic (43), Air Police (77), Communications (29), and Motor Equipment Maintenance (47).

Chief among the gaining career fields was Aircraft and Engine Mechanic (43), receiving nearly 6,400 newly trained personnel. Second in line was Radio/Radar Maintenance (30) with more than 4,000.

It will be noted that the 43 field is listed as both gaining and losing in the report. This, and a few other selected fields, contain both surplus and shortage ladders accounting for the apparent discrepancy.

Air Training Command reports indicate that elimination rates have been exceedingly small among retrainees with less than two percent as opposed to four to ten percent for non-prior-service men.

Air transportable and easily erected or torn down by a six-man crew in approximately 80 hours, this giant radome is believed to be the largest ever constructed. Built by the Goodyear Aircraft Corp. for General Electric's Heavy Military Electronic Department under USAF contract, the plastic structure measures 68 feet in diameter and stands more than seven stories high. Panels are interchangeable, simplifying field service for the fire-retardent, weather-resistant dome which will withstand 150-m.p.h. winds.

AIR AGE LIBRARY

PROFESSIONAL

The Story of Aviation, David C. Cooke, (Archer House, distributed by Herman and Stephens, Inc., $4.95). The scope of this fine new book spans the period from da Vinci to jets and rockets. Mr. Cooke rolls into one gripping history the first efforts of many of the pre-Wright brothers pioneers, stirring tales of the days of Rickenbacker, Guynemer, and Richthofen; the Age of Lindbergh; World War II; and a summation of present day research. The treatment is broad-brush, and the result is a light, descriptive, readable chronicle of the conquest of the air.

Danger in the Air, Oliver Stewart, (Philosophical Library, $6.00). A study of air crash causes grouped under general categories such as pilot error, structural failure, weather, engine failure, crew fatigue, and similar items. Specific case histories are used to illustrate the multitude of causes which can contribute to air disasters and lessons which have been learned, helping to increase flying safety.

A Picture History of Flight, John W. R. Taylor, (Pitman, $7.50). A new, revised, up-to-date photo narrative of flight from man's earliest dreams to the North American X-15 and the Convair *Atlas* ICBM. The book contains more than 700 photos with complete, descriptive captions.

The Air Forces of the World, William Green and John Fricker, (Hanover House, $10.95). The history, development, composition, and estimated current strength of air forces of 83 nations is the subject matter of this book. Written in comprehensive picture-narrative style, it serves as a guide to airpower the world over. It serves as a ready source of information about equipment, bases, organizations, manpower, leaders, and many other hard-to-find facts on the air arms of the nations included. Yes, it does include Soviet Russia.

FICTION

Not in Solitude, Lt. Col. Kenneth F. Gantz, USAF, (Doubleday, $3.50). Here is science fiction dealing with the first Air Force spaceship expedition to Mars. Suspense filled from cover to cover, the story chronicles the exploration accomplished during the stay of the USAF scientific group and of their experiences on both legs of the trip. Well-written and solid, it is projected from known scientific and mathematical facts. The author is editor of the *Air University Quarterly Review.*

Fighters in the Sky, Arch Whitehouse, (Duell, Sloan, and Pearce, $3.00). A collection of ten of the author's top fiction stories with an aerial combat theme. The adventures encompass exploits of fighter pilots from World Wars I and II and Korea.

RELATED READING

Thaddeus Lowe: One-Man Air Corps, Mary Hoehling (Julian Messener, $2.95). The biography of the scientist, inventor, and designer of America's first operational balloons which played a dramatic part in Civil War reconnaissance.

BASELINE USAF

INSPECTION TOUR

Washington, D. C.--Under Secretary of the Air Force Malcolm A. MacIntyre recently returned to Hq USAF after an extensive inspection tour of the Far East.

His jaunt included stops in Tokyo and several other USAF installations throughout Japan as well as on Okinawa, Taiwan, the Philippines, Guam, and Hawaii.

While at Johnson AB, Japan, the secretary was hosted at an NCO Open Mess luncheon and then toured the home of M/Sgt. and Mrs. George Grasser to determine the suitability of family housing in the command.

SCRAMBLE TWO

Wright-Patterson AFB, Ohio--Lt. Col. Charles E. Rigney has declared his 56th Fighter-Interceptor Squadron "combat-ready" after its recent conversion to Lockheed F-104 Starfighters.

Official "welcoming" ceremonies, attended by civic leaders and news media representatives from throughout the midwest, were highlighted by an operational scramble, simulating an actual combat intercept.

1,000,000

Lackland AFB, Tex.--Robert Allen Young, a tall ex-college student from Kokomo, Ind., recently became the one millionth person to enter basic training at this station.

No door prize was awarded.

2,000,000

Graham AB, Fla.--Officials at this USAF contract flying school have announced passage of the 2,000,000-hour mark in student flying.

The total includes those hours piled up at this base, at Graham's earlier post-war school near Greenville, Miss., and those at their WW II school at Souther Field, Americus, Ga.

PERILS OF SANTA

Johnson AB, Japan--Christmas is gone but won't be forgotten here for months--to the dismay of one erstwhile Santa Claus.

Three days prior to Christmas, 240-pound A/3C Robert Shaw, 6041st Operations Sq., generously volunteered to portray Santa Claus for local Japanese children, at Mito Gunnery Range, a small detachment 160 miles north of Tokyo. As his L-20 prepared to land, its single engine quit. The pilot made a dead-stick landing. Then, stepping from his modern sleigh, Santa was joyously mobbed by some 900 Japanese youngsters.

Next day, he rode a parade through the areas adjoining Johnson AB. In mid-parade, a sharp right turn dumped his float into a drainage ditch. Santa sacrificed a large share of his dignity helping to return this newest sleigh to the roadbed. Underway again, the parade was soaked by a sudden rain.

But Christmas Day was the final straw. Shaw smilingly made the rounds of a series of parties prepared for local Japanese orphans, ho-ho-hoing his way into their hearts. Returning to the barracks, he discovered he had been wearing two left boots. His protesting size 13 feet were literally covered with blisters.

in my opinion

by M/Sgt. Robert C. Lougee, *Lincoln AFB, Nebr.*

"All the gimmicks for retention notwithstanding, the true values of Air Force life are the experiences and memories of routine nights like the one at an Air Base in England sometime between 1955 and 1958."

—*The author.*

It had been a tough, but rewarding day. In squadron operations, broad smiles brighten tired faces and the air rings with "well dones."

The Old Man plans for a fast flight to the club with some of the Tigers of 86th Bomb Squadron, then a low altitude hop home in his wingless Morris Minor. His mind is already shelving today and forming the flights for tomorrow.

At the Command Post, the 86th's ingenious line chief grins his satisfaction with the "birds' " homecoming. Three O.K. flights, with an EGT gauge and nose wheel tire change the only write-ups for the completed missions. The chief had just turned the birds around in typical Air Force fashion.

Evening comes and goes. The night air, hanging silent over the base, camouflages the movements of "C" flight's chief as he makes a last check on the alert hardstands, then strolls toward the barracks.

As midnight surreptitiously arrives, old zero-two-seven is still being nursed by the boys in "D" Flight. She is shaking up her keepers with her fuel sequence. The chief vows to stay with his "lady" until he and the crew solve her problems.

By 0300 the only sounds around the ramp are the voiced opinions of zero-two-seven's mechanics who are just now getting the fuel sequence right, and the muffled clanks emanating from the all night dining hall.

The moon comes out, washing the sleek and sleeping B-45s with silver. Leaving zero-two-seven, the chief looks out at the "birds" in their nests and feels ashamed that he swore at his airplane.

"Like children," he thinks. "Calm, peaceful, and beautiful in bed."

But the night has its surprises. A bell rings beside the bed of the duty-ops officer. The message sounds harsh in the peaceful night: "Blue Alert!"

Wake up the Old Man . . . call the O.D. . . . Buzz the squadron C.Q. . . . H double Q is about to break in the sleeping 86th.

Lights on in the Command Post. Line chief rubbing his black stubble and barking orders, calling in the aircraft status, checking on old zero-two-seven. Some guy, this line chief!

Ramp lights wash away the night, rob the disturbed birds of their moonlit cloaks, reveal preflighting crews checking gears, crawling aboard, cursing the cold, damp wind that pries into sleepy eyes. It is 0325 hours.

By 0345 the word goes out. "Ten Birds in the Blue—all targets covered." And for the proud ears of the maintenance crews, the endearing message, "No aborts!"

"And so another night of many during those four short years. We did many things; changed controls and engines, sweated Blue Alerts, squinted against the cold, damp wind, griped and groaned, but became truly aware that we were partners in peace. We also reenlisted."

WHEN the President of Lebanon appealed to the United States for help last fall, President Eisenhower quietly ordered the airlift of American troops into Beirut. The first plane was well on its way before the news made the morning papers.

When such an airlift stretches from the U. S., across Europe, and halfway around the Earth into a strange country where reception is uncertain at the best, reliable communications are essential.

Thus, even before headlines blared the President's decision, a telephone rang stridently in the operations office of 2d AACS Mobile Squadron. The message was terse: "Alert point-to-point radio facilities, homing beacon, and air traffic control personnel for immediate airlift to a classified location."

In 2d Mob "immediate" means within two hours. Because of inherent pre-planning, Team Alpha, 38 strong, had assembled, checked and signed for its equipment within the deadline. The men waited on the flight line with three mobile equipment vans, seven mobile power units and two trucks loaded with tents, rations, weapons, and personal baggage. They were ready.

This mission was old hat to the 2d Mob. In less than a day their point-to-point radio facilities, homing beacon and air traffic control equipment were operating in Beirut, Lebanon. It had been as easy as setting up for an air show, but this was a tactical operation. That's their real job—air traffic control and communications in support of tactical combat units. The squadron is an essential part of the U. S. Air Forces, Europe war plan.

They can go anywhere they are needed and provide, operate, maintain, and support mobile communications

Mobile Communicators

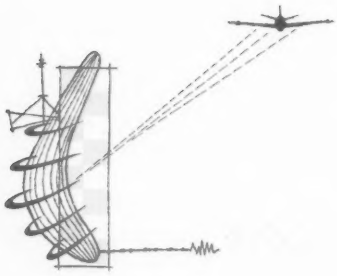
by M/Sgt. Edison T. Blair
Airman Staff

and navigational aids facilities. The job is the same whether it's for a tactical training maneuver, an airshow, or the real McCoy, like it was in Lebanon last fall. In between times the Mob takes over with its mobile facilities whenever and wherever one of the European bases needs modifications or repairs on its communication and navigational aids equipment. This kind of duty makes good training for the boys in 2d Mob.

If you wonder how well they've done their job in the seven years since the squadron was activated, take a look at the appreciative letters in the squadron files. There's one from "The Chief" himself. President Eisenhower commended them for their support during the Hungarian airlift, "Operation Safe Haven." There's also a letter of appreciation from a German National thanking them for helping to save a wine cellar when the Mosel River flooded a few years ago. Further details on this save are vague.

The 2d Mob, as the squadron is known throughout Europe, has its equipment divided into two general categories; Air Traffic Control and Communications. ATC facilities include control towers, homing beacons, radio direction finders, TACAN navigation units, air-to-ground radio, and ground controlled approach equipment. Radio communications equipment covers the whole radio frequency spectrum, includes weather intercept units, radio teletype, cryptographic equipment, and communications center vans. Everything is completely mobile, is easily airlifted and is capable of sustained field operation without further support. If a piece of equipment isn't designed for mobility, 2d Mob technicians will redesign and rebuild it until it is mobile.

The Mob, commanded by Lt. Col. Jim R. Tebbs, is



now a combination of the old 2d Mob and the deactivated 5th AACS Mobile Squadron. The merger took place shortly after 12th Air Force was dissolved. Headquarters is at Hahn Air Base in Germany, but there are four "cells" —composite traffic control and communications units— permanently—as permanently as a 2d Mob unit can be— deployed to other locations in Europe.

Whether the move out Operations Order comes in the form of a classified TWX, a telephone call or in routine correspondence, the procedure is the same. A Team Commander is selected and briefed. He is told the location, assigned frequencies, hours of operation, logistical support to be provided, and any other pertinent information. Other team members are selected by their sections and they recheck their equipment. Supply sorts out necessary logistical support equipment, prepares supplies and spare parts, and issues tents, rations, and whatever else is needed. Weight and cubage is passed along to the headquarters providing airlift. Every man in the squadron is on the team whether he is in the field or not. The team is ready to go within two hours after alerted by the Operation Order. In 2d Mob, TDY is the rule not the exception.

When they aren't on TDY they are training and mobility is second only to excellence. The squadron's excellence is attested by the Squadron of the Month Plaque on proud display in the trophy case. Second Mob took first place honors five times and placed second twice during the seven months of competition at Hahn Air Base.

Meanwhile, they wait for the phone to ring again.

When the Deols, France control tower was shut down for repairs for five weeks, a 2d Mob team took over with a mobile control tower.

Wherever 2d Mob men go they make friends for the Air Force and America. In a Beirut, Lebanon, hotel that housed them during the crisis, a desk clerk applied make-up to a 2d Mob man who "went native" while his teammates watched.

← Trigger fingers were itchy in Lebanon when 2d Mob got a call.

→ Tents, blankets, lister bags, tools, carbines, and rations make 2d Mob's mobile teams self-sufficient anywhere.

How Legal Assistance Can Help You

by Lt. Col. Jake L. Abraham
Legal Assistance Office
Office of The Judge Advocate General, USAF

"The Legal Assistance Program has been established so that you and your dependents may conveniently obtain adequate legal services from military and cooperating civilian lawyers. Though the service rendered by legal assistance officers is free, it should never be considered charity. Rather this service, like religious and medical services, is provided to enable you better to devote your entire energy to the defense needs of the Nation. Therefore, I urge you to read the following article carefully and then to make full and proper use of the services available under the Legal Assistance Program."

Maj. Gen. REGINALD C. HARMON
The Judge Advocate General, United States Air Force

Got a legal problem? See your legal assistance officer.

Back around 604 B. C., LAO referred only to the first name of that wise Chinese philosopher and legendary founder of TAOISM, Lao Tze.

Today, LAO also stands for legal assistance officer, another wise man who can offer sage advice when you have a legal problem.

Just about every large Air Force base has a legal assistance officer nowadays and it's a smart airman who takes the time to find out just what the Air Force has to offer in the line of legal help.

Smaller bases have someone who can direct you to the nearest legal assistance office, or to a civilian attorney. If you happen to be away from an Air Force base at the time you need legal advice and are near an Army or Navy facility, you're still entitled to legal assistance from these sources.

Your Air Force legal assistance officer is an attorney at

law. He is familiar with complicated laws and legal procedures and can answer questions concerning them. Although he'll gladly assist you with almost everything of a legal nature he cannot represent you before any type court or board. Nor does the help offered under the program include strictly official matters like assignments, promotions, or pay problems; these must be taken up with the office concerned.

Your legal assistance officer occupies a rather unique position in the Air Force. He may be consulted professionally by anyone from basic airman on up regarding civil legal personal problems. He is outside the chain of command so far as his legal assistance work is concerned and holds anything you tell him relating to such problems in the strictest confidence. And he can't disclose your confidence without your permission nor may he be ordered to do so by a superior.

He may correspond unofficially with other legal assistance officers if your problem requires him to do so or, if the situation warrants, refer you to a local practicing attorney through a cooperating bar organization.

Simply stated, his job is to help you with your problems by providing legal advice or by preparing legal papers such as wills, powers of attorney, affidavits, and similar documents. And while he can't represent you in court, your legal assistance officer can recommend the wisest course of action for you to follow, and draft letters and documents for your signature.

There is no charge for legal assistance provided by the Air Force. However, if after discussing your problem with the legal assistance officer, you decide that you still need a civilian lawyer, you'll have to pay for that attorney. If you have no money, you may apply for free legal aid from the Legal Aid Society. But legal aid from this source is normally available only where there is a real need for it and when you are *absolutely* unable to pay.

Four points to keep in mind if you want to get the most out of the Air Force's legal assistance service:

1. If in doubt, ask for advice before you sign any contract or make a major purchase or sale. If you get into difficulty, see your LAO immediately for advice.

2. Talk to your legal assistance officer or a private lawyer in person. A telephone conversation is usually unsatisfactory. Your question may be one that cannot be answered immediately.

3. Take all the letters, documents, and papers with you. Your legal officer will prefer to see the papers themselves instead of using your recollection or interpretation of them.

4. Tell him *all* the facts, both those in your favor, and equally important, those not in your favor. Otherwise, the advice he gives you may not be what it should be.

Remember, if in doubt, see your legal assistance officer. Don't worry about "bothering" him because you think your problem is relatively small.

Before You Sign

The following advice on legal matters is not designed to inform you about the law but rather to give you an idea of the type of advice you can get from your legal assistance officer.

At some time or other during your Air Force career you will probably have occasion to rent an apartment or a house. When you do, the following information will help you avoid mistakes made by many an Air Force tenant. If you rent without signing a lease you usually become a tenant from month-to-month, and you can't move, nor can the landlord put you out, without giving the notice required

by state law. Details vary from state to state and should be checked in your locality.

This doesn't mean that the landlord can physically stop you from moving, but it does mean that you can become liable to him for any loss he suffers as a result of your moving without proper notice, and in some states he can hold your furniture until the rent is paid.

If you rent with a lease, remember that it is simply a rental contract and binds you and the landlord just as any other contract does. The fact that you are in the Air Force and receive orders to move doesn't release you from a lease *unless there is a "military clause" in the agreement.* Such a clause generally provides that upon receipt of orders, the lease may be ended by the tenant giving a certain amount of notice to the landlord.

If you move before the time stated in the lease, you may be sued for damages. Again, states may differ on the amount which may be claimed but they all recognize the right of the landlord to sue you. If the landlord is successful, you may find yourself in the discouraging position of paying rent in two places.

Here are a few points to consider before signing your name to a lease. First of all, the rent. Rents are usually higher in areas near military installations. You should bear in mind that unless utilities are furnished, you will have that cost in addition to your rent. If, after moving into an apartment or house, you find that you can't afford to pay the rent, that's just tough luck. It still isn't good enough reason for breaking your lease.

There are other things besides the money involved that should be considered before you commit yourself. You should inquire about the neighbors, investigate play areas for the children, parking space for your car, locations of schools, churches, bus lines, and shopping centers. Give the actual property a shakedown inspection. As a rule the landlord rents "as is."

You should read your lease very carefully and never sign anything you're not prepared to live up to. Make sure there is a military clause. If the landlord promises you something or agrees to waive a requirement, *have him write it in the lease.* If not, it doesn't mean a thing. If you have any doubts, get advice from your legal assistance officer *before you sign.*

Your "Legal Residence"

Remember, the fact that you are in the Air Force and have no permanent street address in a particular city or state doesn't affect your rights as a citizen. At the same time, it doesn't relieve you of the obligations of citizenship.

The residence and domicile of service personnel often present complicated and frequently confusing problems. Generally speaking, "residence" means the place where you're actually living. "Domicile" or "legal residence" means the "home state" or state of which you are a citizen. *It is legally impossible not to have a domicile.*

Most tax laws are usually based on actual residence or presence in the state, which is the primary reason for one of the important sections (514) of the Soldiers' and Sailors' Civil Relief Act. Without this act, you could conceivably be taxed by two or more states in one year because you were living there on the day taxes were assessed.

Although it protects you from multiple taxation, this act doesn't relieve you of your liability for taxes to the state of your legal residence or "domicile," that is, your "home state."

Generally speaking the situation is as follows: *Income Tax*—Your liability for income tax on your military pay is to your legal residence only. The Soldiers' and Sailors' Civil Relief Act protects you from taxation by the state where you are residing solely in compliance with military orders. However, income other than your military pay may be taxed in the state in which it is earned and also by your home state.

Personal Property Tax—You're liable for personal property tax only in your home state. Who owns what property is a question of fact, but generally speaking the husband as head of the household is considered to be the owner of the household furnishings. An automobile is personal property but in different jurisdictions may be subject to different taxes.

Real Property Tax—Taxes on real property are payable only where the property is located. (Your house and the land upon which it is located is one example of real property.) The fact that you buy a house in the locality where you're stationed by reason of military orders doesn't, in itself, determine your legal residence for other tax purposes, but you will have to pay taxes on the house to the state and the county or city in which it is located.

Automobile Registration—You may register your automobile either in your home state or the state in which you are residing in compliance with military orders, but *not* in a third state.

You should consider these points also: If your car is registered in your home state, then all the necessary fees, licenses, and taxes must be paid in that state. Your operator's permit from your home state should be kept up to date. You may be required to obtain a special plate or sticker in the locality where you are living. This is usually free or available for a small handling charge.

As has been said, you may register your auto in the state where you are residing because of military orders. If you do, you must normally comply with the local (city or county) registration laws, get an operator's permit from that state, and comply with the usual inspection, insurance, and other laws.

You should bear in mind that the Soldiers' and Sailors' Civil Relief Act doesn't apply to your dependents. If your wife has an income or owns personal property in her own right (like an automobile or jewelry), she is liable for local taxes. She must in most instances get a local automobile operator's permit and register the car locally if she holds title to it.

Remember that although you may consider yourself exempt from local taxation, this doesn't mean that the local authorities can't question you concerning your liability. In this happens, cooperation with the local authorities will do you more good than harm.

Should you feel that you're being unlawfully taxed, contact your local legal assistance officer immediately.

Various states and localities handle these problems in different ways. When you're transferred to a new duty station, you'd be wise to consult you LAO about local conditions as soon as possible.

Let the Buyer Beware

Caveat Emptor is Latin for "let the buyer beware." Freely translated, it means you buy at your own risk and if you get stuck with a bargain that's not a bargain, it's your own fault.

Many visitors to the legal assistance office are airmen (including officers) who have bought things they couldn't afford—in many cases, didn't even want—or who are saddled with a contract for hundreds of dollars more than they expected.

However, if you go to a reputable dealer—and most dealers are reputable—you'll be saving yourself a lot of trouble. But everybody has run into the other kind.

There is also the occasional fast-talking door-to-door salesman with the honeyed eloquence and the gift of gab. He is the type who appears in residential sections—more often than not, development or apartment areas—and

usually during the daytime when you are at work. He talks so fast and has so many answers that many an airman's wife has signed a contract for several hundred dollars before she realized what she was doing. It's no concern of the salesman that you can't pay for it.

Also beware of the dollar-down, dollar-a-week deal—a rosy picture is painted of how you can enjoy the merchandise while you are paying for it—and the downpayment is *so* small. The salesman doesn't bother to mention that the "dollar-a-week" routine goes on for a long, long time, sometimes long after the item is worn out or discarded. Always remember—when you buy for cash you get more for your money.

Your Signature

Your signature is an intensely personal thing. Given carelessly, it can cause distress and greater loss than if you let a thief get at your possessions.

However, it is unfortunate, but sadly true, that many persons sign contracts or other papers without reading them. Some even sign incompleted contracts relying upon the seller or his agent to fill in the blanks correctly. This practice is as bad or worse than signing without reading. If you completely understand a contract before you sign, the chances are you will avoid difficulty. A complete understanding serves to guard against ill-advised undertakings, as well as fraudulent or unfair schemes. A good slogan to remember is "Read Before You Sign and Keep a Copy." If you don't get a copy, *don't sign*. If you don't understand certain terms, or fine print in the contract, put off signing until you have found out what they mean. The reasons are obvious. Your signature to a contract means that you have agreed to all its terms and provisions. Furthermore, the written document usually speaks for itself, holding the parties strictly accountable for the performance of their written promises. Oral side agreements made at or before the signing of the written contract are worthless.

Time Payment Contracts

Every year a surprisingly large number of airmen are "taken" by unscrupulous business men. Here are a few things to consider before buying any personal property.

The sale of commodities has been greatly stimulated by time-payment financing. The purchaser contracts to pay

down, in cash or trade, a part of the price and to pay the balance, plus or including a finance charge, in monthly payments. Generally when buying an automobile, there may be a premium for insurance as well.

Installment contracts are unlike other contracts. Under them, if you don't meet the payments as agreed, the usual procedure is to take back the property. It is then resold and if the sale price is not enough to cover the balance due plus expenses, *the deficiency may be collected from you.*

In most cases, your installment contract is sold by the seller to a finance company or bank, to whom you then make your payments.

Misrepresentation by the seller would be grounds for breaking your contract with him or for a suit for damages against him. But unless you can prove the financing organization is a party to the misrepresentation, you have no claim against the financing organization. You must pay the finance company or bank the amount of the note and try to collect damages, etc., from the seller.

In other words, if you sign a time-payment contract, you must live up to its terms. You cannot avoid your obligations merely by returning the item purchased.

An example of the type of help which the legal assistance officer can provide is shown in the case of an airman we'll call "Sergeant Jones" for the sake of anonymity. Not long ago he called at the LAO to inquire about the proper procedure for registration of an automobile he had seen at a used car lot the night before and decided to buy.

It developed that since he was scheduled to go overseas in about six months, he wanted to register the car in his wife's name. The legal assistance officer pointed out that if Sergeant Jones registered the car in his wife's name, it would have to be licensed where his wife was living and would therefore be subject to local personal property taxes. Apparently the sergeant hadn't realized this and decided to register it in his own name and thus save annual property taxes. He was then told that it could be registered either where he was stationed or the state which he claimed as his home. The legal assistance officer carefully explained the advantages and disadvantages of registering the car in either of the two states. When the LAO inquired about the method of payment, he found that Sergeant Jones had made the minimum down payment but expected to finance the balance over a 24-month period. He advised Jones to carefully check each item in the total bill for the car, e.g., collision insurance, interest, finance charges, investigation charges, etc., and to get a notarized bill of sale for the car. The LAO cautioned him that the insurance included in the purchase price would probably cover only the unpaid balance due on the car and advised him to secure additional collision as well as liability insurance to cover any damages to others that might result from the operation of his car.

When he was asked about plans for the car while Sergeant Jones and his wife were overseas it developed that they hoped to take the car with them. The legal assistance officer pointed out that until the unpaid balance of the purchase price was settled, it was necessary to obtain the consent of the bank or finance company that purchased the contract from the dealer before the car could be taken out of the country.

This bit of free legal advice enabled Sergeant Jones to see the complications involved. Armed with these facts he was able to make the right decision on whether to buy the car, and if so, how to handle the closing of his purchase, the registration, and the insurance needed for his protection.

Through thousands of contacts with Air Force personnel, legal assistance officers have found that many airmen encounter difficulties or become victims of unfair practices and fraud simply because they lack basic knowledge of their legal rights and obligations. A visit to your legal assistance officer is the answer.

Even the best of us occasionally have problems, or sometimes run into situations beyond our control. At such times, if the problem is of a legal nature, your legal assistance officer can advise you of your rights. Remember, if you need legal advice, your legal assistance officer is the man to see.

SLANTS ON SPACE

/// Ever hear of spectroscopy? It is the fascinating field of astronomy which has enabled man to learn volumes about the composition and other characteristics of celestial bodies millions and billions of miles from the Earth, his working abode.

To accomplish this he has required, in the last analysis, only the two incongruous tools of light and glass.

Although the behavior of visible light passing through glass aroused the attention of a few ancients, the systematic scientific investigation of the phenomenon is generally dated from 1666 and experiments of Sir Isaac Newton of gravitation laws fame.

Briefly, science learned over ensuing years that visible light from heavenly or terrestrial objects, when passed through a glass prism, would break down into component light hues. The visible range ran: red, orange, yellow, green, blue, indigo and violet, all colors visible to the eye, as well as infrared and ultraviolet invisible at the two extremes. This is the spectrum.

The discovery was subsequently matched with another. It was found that all elements—those basic inorganic substances in our world—gave off upon sufficient heating certain individualistic color combinations when their light waves were subject to dispersion. No two combinations were alike, whether the elements were unadulterated or united with others in chemical compounds. The spectrum of an element or compound was as reliable identification scientifically as dogtags.

When the principle was applied to the study of the light from space objects, much of it generated at very high temperatures, astronomers were able to determine from the spectra recorded just what elements made up the Sun, other stars and the like, and with increasingly high reliability as their instruments improved.

Thus in time astronomy has been able to identify in the solar spectrum the existence in the Sun's composition of 66 out of the 92 known elements which are part of the Earth's crust. The remaining 26 elements exist in such rare amounts on our planet that their absence in a spectroscopic profile of the Sun occasioned no scientific surprise.

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/// Research at the University of California at Los Angeles is reported developing evidence that dust particles suspended in the atmosphere may cause as much incoming sunlight to be reflected back out into space as the amount that gets through to reach the Earth's surface. Such a phenomenon, it is pointed out, conceivably could interfere with plans for photographic studies of the Earth's geography by satellites beyond the atmosphere.

/ / /

/// The Fahrenheit scale, in general use throughout this country, is not scientifically popular for recording temperatures of objects in the solar system and the universe of space beyond. Such temperatures are normally found expressed in Centigrade or at times in Kelvin ratings. The latter, named for Lord William T. Kelvin (1824-1907), British physicist and mathematician, are often referred to as absolute temperatures. Here's an idea of how readings compare:

	Water Freezes	Water Boils
F.	32 degrees	212 degrees
C.	0 degrees	100 degrees
K.	273.16 degrees	373 degrees

Kelvin readings, collectively spoken of as the absolute scale, are based on the kinetic theory of heat derived from the laws of physics on the action of gases. Its freezing temperature or absolute zero represents the point at which those infinitesimal components of the universe—the molecules—theoretically have lost the last vestiges of heat energy and all their motion ceases.

/ / /

/// Better resign yourself to living with suspense once investigation of the solar system gets really going. For a probe launched toward Mars some 247 days will elapse before you will know positively of its success. With Venus the time lapse figures about 151 days under favorable conditions.

/ / /

/// The Earth has the third fastest average velocity in orbit among the major planets with a speed of 18.5 miles per second. Venus, the atmosphere-shrouded mystery planet on which much astronomical data still remain imprecise, is tentatively credited second fastest, with an estimated 22 m.p.s. The No. 1 spot goes to Mercury which averages 30 m.p.s. Solar system slow pokes are the two planets most distant from the Sun, Neptune and Pluto, each with the same figure of 3 m.p.s.

/ / /

/// It takes a mere eight minutes for light to flash across the 93 million miles from the Sun to our Earth. In comparison, the National Geographic Society reminds, light from the nearest known other star in our Milky Way galaxy—Alpha Centauri—takes in the neighborhood of four years to reach this planet.

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/// One version of a pet astronomers' story: A celebrated early churchman, writing on creation, noted that some contemporary philosophers and scientists had raised queries about what kept the physical universe from collapsing. He commented the belief existed that the Almighty, before creating heaven and earth, first made hell for those who posed such questions.

AIR FORCE ALBUM

. . . and you'll be saved

Since airplanes began flying over water, survival people have been figuring ways to make temporal seamen out of eternal airmen. Here are some of their brainchildren.

Almost predating swimming, this little model was officially called the B-2. It worked fine as long as the occupants were friends.

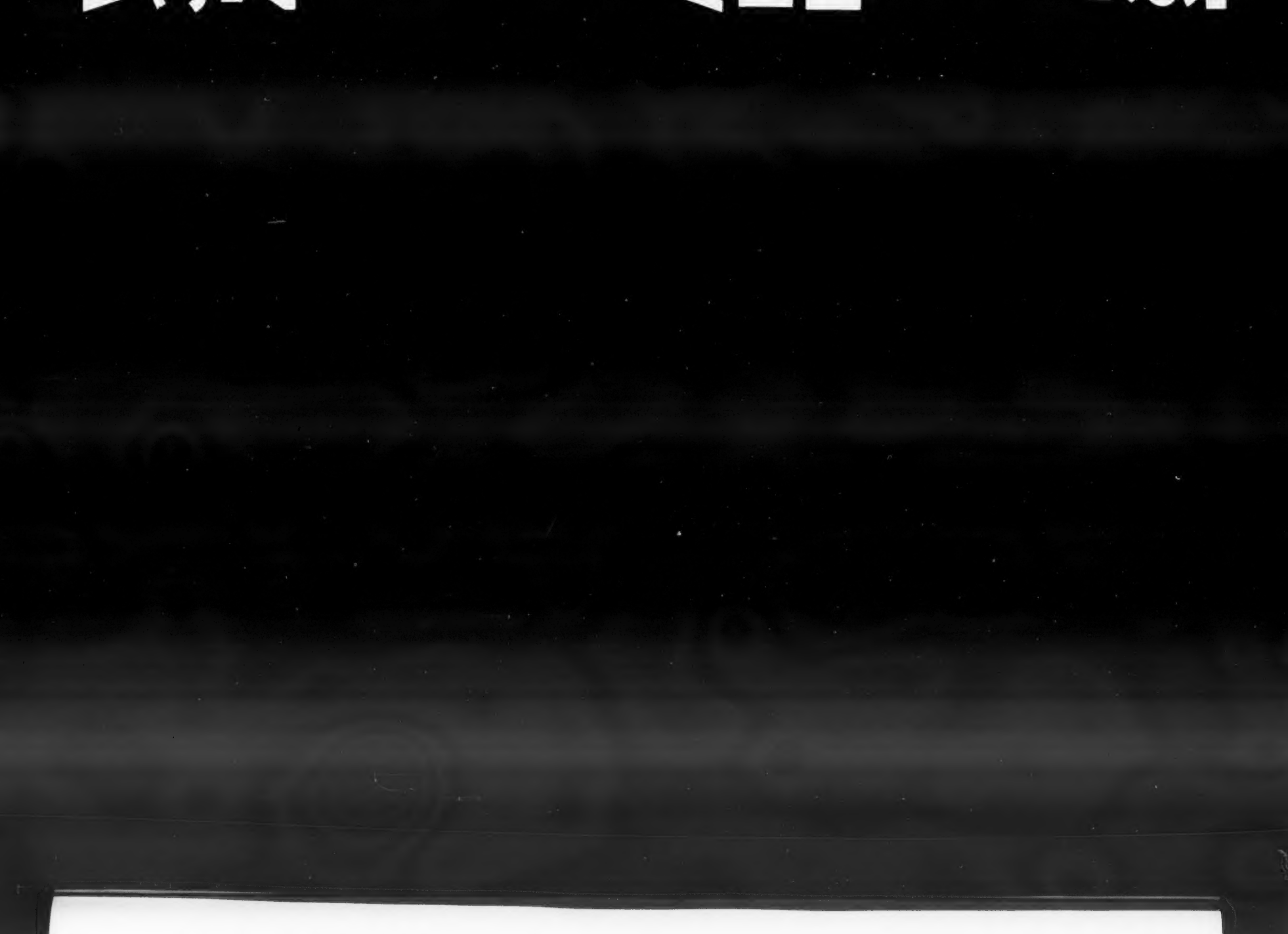
About the time World War II was looming on the horizon, airmen staked their lives on this rubberized undershirt. The amount of wind necessary to blow it up would have sailed a clipper across the Atlantic — especially if you didn't put the plug in.

Cruising down the Potomac, these Bolling AFB airmen—early WW II vintage—test a seven-man model which was subsequently adopted. Standard factory equipment boasted a knife, repair kit, whistle, and square-rigged sail. Optional equipment, available at a slight extra cost on the deluxe models, included a fishing kit, signal outfit, tarp, first aid gear, rations, water for 30 days, and back-up lights.

Below. Finally, in the mid 50s, somebody wised up to the fact that you may as well be comfortable while you wait.

This three-in-one fashion of the 40s combined a flying suit with a life vest and built-in emergency rations. By ingeniously placed bladders, the suit held the wearer face up regardless of how he turned his body. The model didn't stay around long.

Below. Still, with all the fancy gadgets, an old standby that lives till this day is the barracks bag. Somebody forgot to tell this man he's supposed to hold his head out of the water.

Statement by General Thomas D. White
Chief of Staff, USAF, before the House Committee
on Science and Astronautics, 3 February 1959

Aerospace is a term which may be unfamiliar to some of you. Since you will hear it several times during the course of our presentations, I would like to define it for the Committee at this time. The Air Force has operated throughout its relatively short history in the sensible atmosphere around the earth. Recent developments have allowed us to extend our operations further away from the earth—approaching the environment popularly referred to as space. Since there is no dividing line, no natural barrier, separating these two areas, there can be no operational boundary between them. Thus, air and space comprise a single continuous operational field in which the Air Force must continue to function. This area is aerospace.